Yahoo Group Archive: electrichandbag

Yahoo Group summary: The Electric Handbag FT-290 Group

These Yahoo Groups messages were archived in WARC format by ArchiveTeam in 2018. This PDF was generated by Digital Library of Amateur Radio & Communications from the WARC files in 2026.

Date span: 2007-03-04 through 2017-12-13

Source WARC: electrichandbag.euICuHB.warc.gz

Source item: https://archive.org/details/yahoo-groups-2018-03-23T11-57-18Z-1a9bd6

Messages included in this PDF: 882

Yahoo replaced the domain portions of email addresses with @... in the archived messages. Characters lost in Yahoo's archived text appear as ?.

Messages are presented in ascending Yahoo message-ID order. Gaps indicate records absent from the source WARC or messages omitted from this PDF as spam.

1. Welcome

Yahoo group: electrichandbag
Date: 2007-03-04 11:59:08 UTC
From: Martin
Topic: 1 Message: 1

Well, as i have started this group i guess i should be the first to post,

so, welcome to the new FT-290 group. I myself use a FT-290R mk1.

Feel free to talk about any of this series of radios, whether just wanting to know about how to drive the beast, or looking for technical info, ask away!

2. New file uploaded to electrichandbag

Yahoo group: electrichandbag
Date: 2007-03-04 16:50:53 UTC
From: electrichandbag@yahoogroups.com
Topic: 2 Message: 2

Hello,

This email message is a notification to let you know that
a file has been uploaded to the Files area of the electrichandbag
group.

File : /Rules
Uploaded by : zaktherabbit <barfield673@...>
Description : Group usage rules

You can access this file at the URL:
http://groups.yahoo.com/group/electrichandbag/files/Rules

To learn more about file sharing for your group, please visit:
http://help.yahoo.com/help/us/groups/files

Regards,

zaktherabbit <barfield673@...>

3. Good News - muTek are back in businees

Yahoo group: electrichandbag
Date: 2007-03-07 18:08:04 UTC
From: Martin
Topic: 3 Message: 3

I received word today from muTek, that they are close to being ready to start production on the next generation versions of their classic front ends. Although the SLNA290s (the classic FT-290 mutek) is second on the list, i understand they have PCB blanks in stock ready. I also understand that this new generation will use surface mount componants.

I have asked to be placed on their list to be informed when production starts and units become available.

4. muTek front end installation instructions?

Yahoo group: electrichandbag
Date: 2007-03-11 08:44:18 UTC
From: Martin
Topic: 4 Message: 4

Hi all,

Ive now received a 2nd hand mutek SLNA290s unit for my 290,
unfortunately i have no information on how to fit it. Does anyone have
installation notes or instructions for fitting these?

cheers

Martin

5. discussions and posts please !!!

Yahoo group: electrichandbag
Date: 2007-04-28 05:53:56 UTC
From: Martin
Topic: 5 Message: 5

Hi All,

as you know were only a few members strong, but unless we have something on here to read, we will have trouble attracting more members, and we need more members so we can discuss more ! (does that make sense? i hope so)

so, can i encourage you all to start posting your questions, comments about your rigs, your thoughts, equipment comparisons, what other kit you use, what you use your leccy handbag for, etc etc etc,

even just a message to say hi and a little about yourself, it will all help build a community.

For my part, i currently use my 290 in the car, where it is perched very precariously on the dash. I also have a microwave modules 30W linear in the shack. Do any of you have any hints on a good mobile mounting solution for in a ford fiesta? the dash is curved and smooth, not very good for putting radios on!

Im also still desperately trying to find connection details for the mutek preamp for my mk1, and info on what parts need removing etc, if anyone is able to help out?

come on them people, lets have some chat on here

Martin G7MRV

6. Improving the frontend

Yahoo group: electrichandbag
Date: 2007-05-03 07:33:55 UTC
From: f_vos
Topic: 6 Message: 6

I hope sometime during my upcoming holiday break to look closer at the frontend and mixer area of the ft-290 to replace the dualgate frontend with something that will improve its senistivity..

Fred

7. Re: Improving the frontend

Yahoo group: electrichandbag
Date: 2007-05-03 09:19:30 UTC
From: Martin
Topic: 6 Message: 7

Hi Fred,

sounds a great idea, perhaps a modern GaAs FET might make a good
replacement? I would suggest looking at replacing the PIN diodes
with modern low noise types as well.

Be sure to post your results on here

Martin

--- In electrichandbag@yahoogroups.com, "f_vos" <f_vos@...> wrote:
>
> I hope sometime during my upcoming holiday break to look closer at
the
> frontend and mixer area of the ft-290 to replace the dualgate
frontend
> with something that will improve its senistivity..
>
> Fred
>

8. Re: Improving the frontend

Yahoo group: electrichandbag
Date: 2007-05-10 09:55:15 UTC
From: Martin
Topic: 6 Message: 8

Fred, whilst you are investigating the front end, how about taking a look to see how easy it is to 'modernize' the 290?

As well as improving the front end FETs, and perhaps the PIN diodes, i think the 290 would benefit from an upgrade to its FM IF filter. THe 290 has FM bandwidth designed for 25kHz channel spacing, but the standard is now 12.5kHz spacing. As i found out today whilst trying to listen for the ISS on 145.800, adjacent channel breakthrough is now a problem (a local repeater on 145.7875 made it difficult to listen on .800).

The FM deviation can be adjusted easily. My thought is that nothing more than a change of filter would be required. And FM IF filters are very low cost.

Martin G7MRV

--- In electrichandbag@yahoogroups.com, "Martin" <barfield673@...>
wrote:
>
> Hi Fred,
>
> sounds a great idea, perhaps a modern GaAs FET might make a good
> replacement? I would suggest looking at replacing the PIN diodes
> with modern low noise types as well.
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> Be sure to post your results on here
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> Martin
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> --- In electrichandbag@yahoogroups.com, "f_vos" <f_vos@> wrote:
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> the
> > frontend and mixer area of the ft-290 to replace the dualgate
> frontend
> > with something that will improve its senistivity..
> >
> > Fred
> >
>

9. Re: Improving the frontend

Yahoo group: electrichandbag
Date: 2007-05-10 14:29:27 UTC
From: g3vvt@aol.com
Topic: 6 Message: 9

In a message dated 10/05/07 12:33:11 GMT Daylight Time, "Martin"
barfield673@... zaktherabbit writes:

As well as improving the front end FETs, and perhaps the PIN diodes,
i think the 290 would benefit from an upgrade to its FM IF filter.
THe 290 has FM bandwidth designed for 25kHz channel spacing, but the
standard is now 12.5kHz spacing. As i found out today whilst trying
to listen for the ISS on 145.800, adjacent channel breakthrough is
now a problem (a local repeater on 145.7875 made it difficult to
listen on .800).

The FM deviation can be adjusted easily. My thought is that nothing
more than a change of filter would be required. And FM IF filters
are very low cost.

Hi Martin,

Am afraid your remark about FM IF filters being available at very low cost
is sadly not correct for the Yaesu FT290.

The first IF XF1001 uses a pair of 108M30B which are 2 pole filters of
probably 30kHz BW, though for a more uncommon 10.81MHz IF. Plenty of the 10.7MHz
types about, but not ones for this frequency. The second IF uses either a
CFG455E-1 or a SLFD15SA. ceramic block filter. The information for the first
option lists it at 16kHz BW and the second is probably 15kHz BW. This one could
be replaced by a compromise CFG455F with 12kHz BW or if you are really serious
a CFG455G with 8kHz BW. The second option however would make reception of
the 25kHz standard radios with their +/-5kHz deviation difficult.

As a 2m repeater keeper I can assure you that there are more stations still
using +/-5kHz deviation than +/-2.5kHz even when they have switchable
deviation!

Assuming you cannot locate a suitable 10.81MHz filter for the 1st IF the
second IF filter change is the only option. I would go for the 12kHz BW option
using the CFG455F. These filters are not as widely available as they used to be
and will probably have to pay in the region of £12 if you are lucky enough
to locate a source.

The Yaesu FT480R uses the same 10.81MHz 1st IF filter, but in the 455kHz IF
has two filters of which the 1st is a CFW455F a 12kHz BW filter followed by a
LF-B15 which is probably 15kHz BW and as such is more usable. It is always
better to get your selectivity in a radio as early as possible but with the
FT290 and other Yaesu radios of this era may not be able to be done due to the
odd 1st IF. I have an FT480R as my main 2m radio in the shack and have not
found any problem at 12.5kHz spacing so far, though most stations and repeaters
are some distance away. By the way the standard on 2m is not 12.5KHz channel

spacing, depends which part of the band you are in. UK 2m repeaters however are all to 12.5kHz standards and the keepers have to sign an annual declaration to Ofcom that they conform to have the NoV (licence) renewed.

The RX 1st RF MOSFET can be replaced for a BF981 or better still apparently the BF982. I have used the BF981 to good effect in several radios including the FT480R. Drops straight in when you bend the leads down at 90 degrees with the labelling facing up as the pin out is identical. Not needed in my FT290 as it already sports the Mutek front end.

The two PIN diodes replaced for more modern devices maybe. I have no experience to support the change one way or the other.

Finally deviation. Since the mix of 12.5kHz and 5kHz standard came into use, on all my own mainly old radios have adopted a standard of +/-3kHz deviation. This is wider than normal for 12.5kHz standards, though will just fit in with the narrowest of IF filters as long as both ends are on the correct frequency! With the 25kHz standard RX is quieter than normal, but acceptable. Did try +/-3.5kHz at one point but fell down due to clipping. When doing modulation checks you have to allow for TX CTCSS if in use as this is additive to the speech modulation. I use a standard of +/-250Hz for TX CTCSS for all channel spacings. This means that with +/-3kHz speech deviation and +/-250Hz CTCSS the total deviation will be +/-3.25kHz, which will fit in with even a 12.5kHz standard Pye Westminster with 7kHz BW IF filters fitted.

Regards,
Bob, G3VVT
Keeper GB3LD/GB3LF

10. Re: Improving the frontend

Yahoo group: electrichandbag
Date: 2007-05-15 18:41:08 UTC
From: Martin
Topic: 6 Message: 10

Hi Bob,

Ah yes, your right of course! I must confess i hadnt studied the IF in detail, and had just assumed that the 290 used a 10.7MHz 1st IF. The 10.81MHz as you rightly say makes things much more difficult and more expensive. So the 2nd IF would be the way to go as you say, but the question then becomes is it worth the cost and effort? My 290 is used mostly for SSB, so in my case probably not.

With regards to deviation, on 25kHz spaced equipment i set to 4.33kHz, and on 12.5kHz spacing to 2.22kHz, including CTCSS/PL at 250Hz as appropriate. These are the deviation settings that were found best when i worked on Home Office radio services (police/fire etc). 3kHz sounds a perfectly good compromise to enable the old 290 to co-exist reasonably well with old and new equipment.

Good notes on the MOSFETs. Using one that just drops in pin for pin is far preferable to having to re-engineer/bodge a modern device into circuit.

Incidentally, my old FT-290 mk1 is currently on ebay. I managed to get my friends 290 with a mutek already fitted instead. Saved lots of hassle,

Martin G7MRV

--- In electrichandbag@yahoogroups.com, g3vvt@... wrote:
>
>
> In a message dated 10/05/07 12:33:11 GMT Daylight Time, "Martin"
> barfield673@... zaktherabbit writes:
>
> As well as improving the front end FETs, and perhaps the PIN diodes,
> i think the 290 would benefit from an upgrade to its FM IF filter.
> THe 290 has FM bandwidth designed for 25kHz channel spacing, but the
> standard is now 12.5kHz spacing. As i found out today whilst trying
> to listen for the ISS on 145.800, adjacent channel breakthrough is
> now a problem (a local repeater on 145.7875 made it difficult to
> listen on .800).
>
> The FM deviation can be adjusted easily. My thought is that

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> more than a change of filter would be required. And FM IF filters
> are very low cost.
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> Hi Martin,
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> Am afraid your remark about FM IF filters being available at very
low cost
> is sadly not correct for the Yaesu FT290.
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> The first IF XF1001 uses a pair of 108M30B which are 2 pole
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> probably 30kHz BW, though for a more uncommon 10.81MHz IF. Plenty
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> types about, but not ones for this frequency. The second IF uses
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> CFG455E-1 or a SLFD15SA. ceramic block filter. The information
for the first
> option lists it at 16kHz BW and the second is probably 15kHz BW.
This one could
> be replaced by a compromise CFG455F with 12kHz BW or if you are
really serious
> a CFG455G with 8kHz BW. The second option however would make
reception of
> the 25kHz standard radios with their +/-5kHz deviation difficult.
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> As a 2m repeater keeper I can assure you that there are more
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> using +/-5kHz deviation than +/-2.5kHz even when they have
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> deviation!
>
> Assuming you cannot locate a suitable 10.81MHz filter for the 1st
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> second IF filter change is the only option. I would go for the
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> using the CFG455F. These filters are not as widely available as
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> and will probably have to pay in the region of £12 if you are
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> has two filters of which the 1st is a CFW455F a 12kHz BW filter
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> LF-B15 which is probably 15kHz BW and as such is more usable. It
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> better to get your selectivity in a radio as early as possible but
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> FT290 and other Yaesu radios of this era may not be able to be
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> Finally deviation. Since the mix of 12.5kHz and 5kHz standard came
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> try +/-3.5kHz at one point but fell down due to clipping. When
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> modulation checks you have to allow for TX CTCSS if in use as this
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> speech modulation. I use a standard of +/-250Hz for TX CTCSS for
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> spacings. This means that with +/-3kHz speech deviation and +/-
250Hz CTCSS
> the total deviation will be +/-3.25kHz, which will fit in with

even a 12.5kHz
> standard Pye Westminster with 7kHz BW IF filters fitted.
>
> Regards,
> Bob, G3VVT
> Keeper GB3LD/GB3LF
>

11. Re: muTek front end installation instructions?

Yahoo group: electrichandbag
Date: 2007-05-24 14:27:16 UTC
From: Bob Wilkinson
Topic: 4 Message: 11

--- In electrichandbag@yahoogroups.com, "Martin" <barfield673@...>
wrote:
>
> Hi all,
>
> Ive now received a 2nd hand mutek SLNA290s unit for my 290,
> unfortunately i have no information on how to fit it. Does anyone
have
> installation notes or instructions for fitting these?
>
>
> cheers
>
> Martin
>

Hi Martin,

Just found the original 3 pages of installation instructions for the Mutek SLNA145SB front end for the FT-290R dated 1983. As well as the installation instruction this gives the circuit diagram of this preamp.

Will scan by early next week probably in gif format. Do you want this sending for upload to the group files?

Also with this found the original colour sales brochure for the FT-290R/FT-690R which may need to be done in jpg format. Do not have facilities to transfer to pdf which may be the best format if it is intended to be placed in the files section of the group.

Let me know direct how you want this routed.

Regards,
Bob, G3VVT

12. Re: muTek front end installation instructions?

Yahoo group: electrichandbag
Date: 2007-05-25 15:51:30 UTC
From: dl3bc
Topic: 4 Message: 12

```
--- In electrichandbag@yahoogroups.com, "Bob Wilkinson" <g3vvt@...>
wrote:
>
> --- In electrichandbag@yahoogroups.com, "Martin" <barfield673@>
> wrote:
> >
> > Hi all,
> >
> > Ive now received a 2nd hand mutek SLNA290s unit for my 290,
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> >
> > cheers
> >
> > Martin
> >
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> 290R/FT-690R which may need to be done in jpg format. Do not have
> facilities to transfer to pdf which may be the best format if it
is
> intended to be placed in the files section of the group.
>
> Let me know direct how you want this routed.
>
> Regards,
> Bob, G3VVT
>
```

Hi Bob,

If you send me both scanned files by e-mail I could convert them to PDF and upload them to the files section. I think there would be some interest in both of them.
I would recommend to scan b/w documents to GIF format and the coloured to JPG.

Kind regards,
Thorsten DL3BC

13. Re: muTek front end installation instructions?

Yahoo group: electrichandbag
Date: 2007-05-30 17:24:54 UTC
From: dl3bc
Topic: 4 Message: 13

--- In electrichandbag@yahoogroups.com, "Martin" <barfield673@...>
wrote:
>
> Hi all,
>
> Ive now received a 2nd hand mutek SLNA290s unit for my 290,
> unfortunately i have no information on how to fit it. Does anyone
have
> installation notes or instructions for fitting these?
>
>
> cheers
>
> Martin
>

Hi Martin,

I just uploaded the original installation instructions to the files
section of this group. Thank you for scanning, Bob (G3VVT)!
I think it would be interesting if you report your experience with
the installation to this group.

Kind regards,
Thorsten DL3BC

14. Re: muTek front end installation instructions?

Yahoo group: electrichandbag
Date: 2007-05-31 17:43:11 UTC
From: Martin
Topic: 4 Message: 14

Thankyou Thorsten, it makes much more sense when you have the
instructions!

I no longer have the mutek board, having managed to get a 290 with
one already fitted. However, i will contact the person who bought the
board from me and ask if he will share his experience on here for us.

Martin G7MRV

--- In electrichandbag@yahoogroups.com, "dl3bc" <dl3bc@...> wrote:
>
> --- In electrichandbag@yahoogroups.com, "Martin" <barfield673@>
> wrote:
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> the installation to this group.
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> Kind regards,
> Thorsten DL3BC
>

15. Saving Space - Converting a FT290 to 'Remote Head' ?

Yahoo group: electrichandbag
Date: 2007-05-31 17:51:09 UTC
From: Martin
Topic: 15 Message: 15

Hi All,

I drive a Ford Fiesta, and im very strapped for space for radios. At present the 290 is velcro'ed to the top of the dashboard, but this is far from ideal!

The thought occurs to me - since in a mobile setting the internal antenna is not used, and assuming such portable use would not be needed, how much work would be involved in converting a FT290mk1 (or mk2 for that matter) to a 'remote head' ?

It would of course entail some clever 'boxing up' of the exposed electronics, but generally i think all that would be needed would be to discard the internal antenna tube, and take the front panel wiring to a pair of suitable connectors that could then be linked by a cable.

A 290 mounted in the boot (trunk) or under a seat, and a linear, would be a nice, hidden away system, and the head could be removed for security, and unlike modern radios that do this (save the HF/VHF do it alls) it is still all mode, and what a fantastic 'retro' look!

Im going to take a look at what would be involved. What are other peoples thoughts on this idea? has anyone ever tried it?

Martin G7MRV

16. Re: muTek front end installation instructions?

Yahoo group: electrichandbag
Date: 2007-05-31 00:50:13 UTC
From: Bob Wilkinson
Topic: 4 Message: 16

--- In electrichandbag@yahoogroups.com, "dl3bc" <dl3bc@...> wrote:
>
> ---
> I think it would be interesting if you report your experience with
> the installation to this group.

Hi Thorsten,

I think Martin got hold of a Yaesu FT290R with the SLNA-145sb already installed so the need to do the work there ceased. Likewise the FT290R I have came with the SNLA-145sb already in place, though with all the documentation.

In my case however the FT290R is all but dead in the water as the only thing that works is the on/off switch and curiously for an FT290R mk1 the LCD backlights! Was given the radio for repair and the original owner has since acquired another, so gave me the radio. Not had the time to have a serious attempt on the repair as yet, though have now got hold of a basic copy of the Yaesu FT290R service manual to suppliment the original owners manual. Got five other projects in the way that seem to be taking for ever:

New 2m repeater using a Nokia BSR-150/LN.
New 70cm repeater using a Tait T800SL.
Repairs to an Icom IC-701 with an intermitent VFO fault(most likely through rivets on an inaccesible double sided board).
My mobile VHF/UHF radio a Yaesu FT2700RH is loosing TX output on UHF due to the PA power control transistor overheating which may be the block PA.
Rebuilding a Datong DF-1 DF system that is missing the head unit.

None of these are straight forward tasks and may be some time yet before the FT290R gets it's share of my attention. Will post the information when I resolve the problem.

Regards,
Bob, G3VVT

17. Re: Saving Space - Converting a FT290 to 'Remote Head' ?

Yahoo group: electrichandbag
Date: 2007-06-02 14:41:57 UTC
From: Martin
Topic: 15 Message: 17

Ive done some investigations into this -

assuming i have spotted them all, there are 54 wires from the 'head' to the rest of the radio. That is from the keypad and display boards and the switches etc. Thats not including the audio circuits, which need a shielded pair for the volume control, and a shielded pair for the mic/af out. Another issue of course is that the AF out would need to go to an external loudspeaker, but that could be done from the speaker jack anyway.

So, its a lot of wires! cable to do this would be about a cm thick, and would need some interesting plugs! Some multicore telephone network cables have this many cores.

But, im still going to have a go! assuming i can get a 290mk1 for cheap. I cant vouch for how many connections a mk2 would need, as i dont have one, but i have a feeling it may be a few less.

Martin

--- In electrichandbag@yahoogroups.com, "Martin" <barfield673@...> wrote:
>
> Hi All,
>
> I drive a Ford Fiesta, and im very strapped for space for radios. At
> present the 290 is velcro'ed to the top of the dashboard, but this is
> far from ideal!
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> The thought occurs to me - since in a mobile setting the internal
> antenna is not used, and assuming such portable use would not be
> needed, how much work would be involved in converting a FT290mk1 (or
> mk2 for that matter) to a 'remote head' ?
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> electronics, but generally i think all that would be needed would be
> to discard the internal antenna tube, and take the front panel wiring
> to a pair of suitable connectors that could then be linked by a
> cable.
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> would be a nice, hidden away system, and the head could be removed
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> do it alls) it is still all mode, and what a fantastic 'retro'
look!
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> Im going to take a look at what would be involved. What are other
> peoples thoughts on this idea? has anyone ever tried it?
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> Martin G7MRV
>

18. mutek enquirery

Yahoo group: electrichandbag
Date: 2007-06-04 14:44:23 UTC
From: NIGE
Topic: 18 Message: 18

hi all I have a 290r that I bourt recentley but how do I know if it has a mutek front end fitted. can you tell me what it looks like and where inside the radio to look. thanks Nige

19. Re: mutek enquirery

Yahoo group: electrichandbag
Date: 2007-06-04 19:09:55 UTC
From: Martin
Topic: 18 Message: 19

HI Nige, welcome to the group,

If you remove the battery compartment cover, with the front of the radio towards you, on the right you will see a small board with a row of switches. In front of this board is where the Mutek fits. If there is one fitted, there will be a board in this space that you will see has coil 'cans' on it. If not it will either be an empty space or there will be a CTCSS board in there, with DIP switches i think.

Martin G7MRV

--- In electrichandbag@yahoogroups.com, "NIGE" <lostatsea@...> wrote:
>
> hi all I have a 290r that I bourt recentley but how do I know if it has
> a mutek front end fitted. can you tell me what it looks like and where
> inside the radio to look. thanks Nige
>

20. New 'old' toy

Yahoo group: electrichandbag
Date: 2007-06-19 07:35:54 UTC
From: robialbion
Topic: 20 Message: 20

Hi all
Great group! I have just recently bought a tidy FT290R about 24 years after first getting the brochure and thinking 'must get one of those'!
Can anyone suggest a good (cheap) source for 'C' Ni-mh cells and also contact details for Mutek. I've posted some photos of the new toy but couldn't persuade the manual pdf to upload.
Looking forward to some QRP 2m SSB with the portable 6 ele-yagi soon from the north coast of Jersey C.I. IOTA EU-013.
73 de RobL 2J0RZD

21. FT-290 r First Series Help

Yahoo group: electrichandbag
Date: 2007-09-09 14:12:05 UTC
From: radiovintage2000
Topic: 21 Message: 21

Hallo
When my FT290r (first series) is off for much time (2 Days or
Plus) ,when I power on ,
the smeter remains to over full scale, with passing of the time
(60minuti or less ,it depends on the period that has been power off)
the smeter returns normal to Zero.
the defect is the classic, or CAG or a condenser in loss but I do
not find the defect.
Please help me many tnx Frank

22. Re: FT-290 r First Series Help

Yahoo group: electrichandbag
Date: 2007-09-10 11:29:52 UTC
From: g3vvt@aol.com
Topic: 21 Message: 22

Hi Frank,

Had a partially similar problem with the same radio where the S meter remained at full scale for maybe 10 minutes, but this was accompanied with low or no TX output that slowly came up as time progressed and the S meter reading fell. Never did track down the cause which vanished when the radio was used on a regular basis. Maybe a blanket replacement of electrolytics in the RX area would supply a cure. Could in your case be instability brought on by poor decoupling from failing decoupling capacitors or similar?

Would be very interested in any feedback from your problem when solved.

Talking about failing electrolytic capacitors I have an Italian manufactured Microset PT135 13.5VDC 35A PSU that has a failed electrolytic smoothing capacitor. Have lost the schematic diagram and Microset will not reply to my e-mail messages. The original capacitor is a Kendeil 25,000uF 25VDC also made in Italy. So far not able to source a suitable replacement capacitor that will fit the space 50mm dia x 65mm high with 2 x 5mm screw terminals at about 22mm spacing. There are what appears to be a pair of these capacitors in the smoothing capacitor location, so need to change the pair if any size change is made.

Any ideas how to get answers from Microset as the PSU is still currently manufactured?

Regards,
Bob, G3VVT

23. Making the dial spin free?

Yahoo group: electrichandbag
Date: 2007-11-25 23:38:06 UTC
From: Martin
Topic: 23 Message: 23

I use my mk1 almost exclusively for SSB, and find the 'clicks' as i turn the dial knob quite annoying, not to mention tiring when searching the SSB portion of the band for weak signals. I would much prefer to have a free spinning dial as found on most HF rigs. Does anyone know how hard it would be to remove the 'click'?

Martin G7MRV

24. Re: Making the dial spin free?

Yahoo group: electrichandbag
Date: 2007-11-26 12:31:43 UTC
From: robialbion
Topic: 23 Message: 24

--- In electrichandbag@yahoogroups.com, "Martin" <barfield673@...>
wrote:
>
> I use my mk1 almost exclusively for SSB, and find the 'clicks' as i
> turn the dial knob quite annoying, not to mention tiring when
> searching the SSB portion of the band for weak signals. I would much
> prefer to have a free spinning dial as found on most HF rigs. Does
> anyone know how hard it would be to remove the 'click'?
>
>
> Martin G7MRV
>
Hi Martin
Don't know, never tried but there is an article on the web by a JA I
think who removed the click stops from the VFO on an admittedly more
modern FT747. Cannot find it now but may give you a useful lead!!

73 de Rob 2J0RZD

25. MuTek Preamp Data available

Yahoo group: electrichandbag
Date: 2007-12-04 11:56:43 UTC
From: Martin
Topic: 25 Message: 25

Chas at Mutek has very kindly informed me that they have now got some of the legacy products, such as the SNLA145, the original FT-290mk1 mutek, information and data available to download as pdf files on their website www.mutekrf.com

this is something ongoing so keep watching if your mutek board isnt yet on there.

26. New file uploaded to electrichandbag

Yahoo group: electrichandbag
Date: 2007-12-04 11:58:15 UTC
From: electrichandbag@yahoogroups.com
Topic: 2 Message: 26

Hello,

This email message is a notification to let you know that
a file has been uploaded to the Files area of the electrichandbag
group.

File : /SLNA145sbinst_1.pdf
Uploaded by : zaktherabbit <barfield673@...>
Description :

You can access this file at the URL:
http://groups.yahoo.com/group/electrichandbag/files/SLNA145sbinst_1.pdf

To learn more about file sharing for your group, please visit:
http://help.yahoo.com/help/us/groups/files

Regards,

zaktherabbit <barfield673@...>

27. Where can I buy the connector used by the microphone.

Yahoo group: electrichandbag
Date: 2007-12-30 01:22:38 UTC
From: paulallans
Topic: 27 Message: 27

I want to connect the FT-290R to my AEA PK232 to run packet. (As they are both antique equipment it should be fun to use.)
But....
Where can I buy the 7 pin DIN connector (A center pin surrounded by 6 pins) that the microphone uses??? It seams not to exist any where.

RSVP to the group with any ideas please.

Paul.

28. Re: Where can I buy the connector used by the microphone.

Yahoo group: electrichandbag
Date: 2007-12-31 12:22:26 UTC
From: g3vvt@aol.com
Topic: 27 Message: 28

In a message dated 31/12/07 10:25:17 GMT Standard Time,
electrichandbag@yahoogroups.com writes:

Where can I buy the 7 pin DIN connector (A center pin surrounded by 6
pins) that the microphone uses??? It seams not to exist any where.

Hi Paul,

First the connector is not a DIN type.

In the USA I believe it is referred to as the Foster connector. In the UK it can be called "Locking Multipole Line Socket" as the plug part is chassis mounted on the radio. Four and eight pin variants are used in most HF base stations, CB and earlier VHF/UHF radios. For mobile use has been replaced by the cheaper RJ series telephone/computer connector.

Is getting more difficult to source in the UK though can often be found at radio rallies (Hamfests) and is listed by a few specialist component suppliers such as JAB Components in the UK. You do not state where you are located, but may be in the USA due to using that country's version of spelling of center rather than the normal UK version, centre. Would have thought they should be available from Universal Radio and similar suppliers.

Will have to get a spare for myself as the last one I had was used in an external CTCSS unit built for a FT-290R for a local amateur.

Regards,
Bob, G3VVT

29. Its Official - Solar Cycle 24 has started

Yahoo group: electrichandbag
Date: 2008-01-04 21:25:30 UTC
From: Martin
Topic: 29 Message: 29

Solar Cycle 24 has now started. NASA released a press announcement today making it official. A very small, but none the less reversed polarity, high latitude sunspot has appeared, which marks the start of the new cycle.

solar activity will probably take 3-5 years to peak, likely to be around 2012 (just in time for the olympics and the TV digital switchover!)

just time to get those antennas up and rigs checked!

By the time the peak arrives, and its predicted to be a good one, conditions should be such that our 290s and 690s, with a good antenna, will be cracking our signals around europe over sporadic E, and bouncing off the auroras

Martin G7MRV

30. ft-290r I service manual

Yahoo group: electrichandbag
Date: 2008-01-10 02:56:13 UTC
From: cristian
Topic: 30 Message: 30

HI all.
i have an ft-290rI, and after approx. 10 minute from power on the transceiver stack... frecvency remain on display, front key board and main dial do not do enithing... ptt not work too. Receiver its working on the last frecvency, but not good. I mesure tension on avr unit, and its ok, i found a lot of electrolitic capacitors with electrolit discharge on terminals, change them, but no improvement....seems to be more problem. i need a copy of service manual.
Thank you.
73` yo3fwl Cristian

31. Re: ft-290r I service manual

Yahoo group: electrichandbag
Date: 2008-01-12 18:05:33 UTC
From: Martin
Topic: 30 Message: 31

Hi Cristian,

the user manual also contains the service details, circuit diagrams etc. I have just tried to upload a copy in pdf format but it was rejected for being too big a file. If you have not managed to download a copy (i think someone on the amateur repairs groum gave you a link?) let me know and i will email it to you direct.

Martin G7MRV

--- In electrichandbag@yahoogroups.com, "cristian" <yo3fwl@...> wrote:
>
> HI all.
> i have an ft-290rI, and after approx. 10 minute from power on the
> transceiver stack... frecvency remain on display, front key board and
> main dial do not do enithing... ptt not work too. Receiver its working
> on the last frecvency, but not good. I mesure tension on avr unit, and
> its ok, i found a lot of electrolitic capacitors with electrolit
> discharge on terminals, change them, but no improvement....seems to be
> more problem. i need a copy of service manual.
> Thank you.
> 73` yo3fwl Cristian
>

32. Re: Where can I buy the connector used by the microphone.

Yahoo group: electrichandbag
Date: 2008-01-26 16:05:46 UTC
From: paulallans
Topic: 27 Message: 32

Thanks for the help with trying to locate the microphone connector.
I eventually found the following web site:

http://www.therfc.com/

I bought two microphone connectors for $11.75 delivered to my address
in the USA. (they were $2.50 each, plus shipping.)
Just thought I would let people know about a good source of RF
connectors.
all the best.
Paul

33. hi and problems

Yahoo group: electrichandbag
Date: 2008-02-28 19:59:57 UTC
From: hughie
Topic: 33 Message: 33

Hi and thanks for letting me become a member of the group..names
hughie qth middlesbrough.

Right down to problems...bought a FT-290R mk1.
It all light up ok and transmits on usb and also FM-, but it will not
tx on simplex. FM+ or cw....waiting for a mic plug so only pressing
the call button to put into tx mode,and a key for cw, also it has a
rubber duck antenna YHA-15, when this is installed i can squelch out
the white noise but if i put my external ant in the back the squelch
does not appear to work.

Has anyone had similar problems..???

Can anyone point me in the right direction..??

Have downloaded a user manual but cant seem to find a service manual.

Many Thanks in advance

hughie.

G7NQR/M0HMS

34. Re: hi and problems

Yahoo group: electrichandbag
Date: 2008-02-28 20:24:17 UTC
From: Martin
Topic: 33 Message: 34

Hi Hughie, welcome to the group

ive just taken a look at the schematics, and it seems to me that since FM- works, as does USB, but not FM, FM+ or CW (you didnt mention LSB) that you may have some wiring damage to the switches on the front panel. If FM- works, then i would expect FM and FM+ to work also. Is there any sign of damage to the front panel? Unfortunately, the front panel of these radios is pretty awkward to work on.

As for the squelch, when using the external aerial, remove the rubber duck, or if you have the telescopic fitted instead, make sure it is fully retracted, otherwise the radio is attempting to use both antennas at once!

Service manuals are hard to find, but the instruction manual contains most of the service info and circuit diagrams

once you get a microphone sorted, make a few more tests and report back what you find

Martin G7MRV
Group owner and moderator

--- In electrichandbag@yahoogroups.com, "hughie" <m0hms@...> wrote:
>
> Hi and thanks for letting me become a member of the group..names
> hughie qth middlesbrough.
>
> Right down to problems...bought a FT-290R mk1.
> It all light up ok and transmits on usb and also FM-, but it will
not
> tx on simplex. FM+ or cw....waiting for a mic plug so only pressing
> the call button to put into tx mode,and a key for cw, also it has a
> rubber duck antenna YHA-15, when this is installed i can squelch
out
> the white noise but if i put my external ant in the back the
squelch
> does not appear to work.
>
> Has anyone had similar problems..???
>
> Can anyone point me in the right direction..??
>
> Have downloaded a user manual but cant seem to find a service
manual.

>
> Many Thanks in advance
>
> hughie.
>
> G7NQR/M0HMS
>

35. FT290R Workshop (service) manual

Yahoo group: electrichandbag
Date: 2008-02-29 11:17:49 UTC
From: g3vvt@aol.com
Topic: 35 Message: 35

Hi Hughie,

Second attempt with the correct model number. See what happens when you try to write letters after a night's work!

Pretty sure there is a copy of the FT-290R (mk1) workshop manual of sorts on _www.mods.dk_ (http://www.mods.dk/) . Some of the photos did not come out too well, but were usable. Really for most purposes the operating manual for the early Yaesu radios such as the FT290R was pretty good with circuits and alignment information. If you do not have a good copy of this with your download there is an excellent copy on CD that can be purchase for £10 delivered in the UK from Geoff Brown at:

http://www.amateurmanuals.co.uk/ (http://www.amateurmanuals.co.uk/)

The later FT290 mkII was totally different on this score with a definite lack of information. Took me a while to find out where the deviation control was located, though found later a proper workshop manual is available for the mkII from the above source, again at £10. Sadly he does not carry the workshop manual for the FT290R. Have purchased other Yaesu workshop manuals from the same source in the past and have found the quality good.

Hope this helps with sorting out your problem.

Regards,
Bob, G3VVT

36. Anyone Fitted CTCSS In FT290R MK1

Yahoo group: electrichandbag
Date: 2008-03-08 14:46:31 UTC
From: Andy
Topic: 36 Message: 36

Hi all
Has anyone fitted CTCSS into there FT290R MK1.
Any information appreciated about fitting.

Cheers Andy G6OHM

37. Re: Anyone Fitted CTCSS In FT290R MK1

Yahoo group: electrichandbag
Date: 2008-03-09 17:57:53 UTC
From: g3vvt@aol.com
Topic: 36 Message: 37

Hi Andy,

There is not really much room inside the case if the normal Mutek preamp is fitted. Though will be OK inside if this is not and can be connected to the rear of the mic socket for operating voltage and tone injection.

Easier to build it up as an external unit via the mic plug and take the power from that. Have been involved with fitting it to three radios: FT-290R, FT-290R II and FT-790. Seems to work OK apart from the CTCSS can be adversely affected by the clipping circuit on mod peaks it would appear. When the unit can be mounted internally better as the normal CTCSS access point after the deviation control can be added. Not sure if there was a USA version that actually had CTCSS as an option, but so far not found anything on the European FT290R diagram that would indicate this. As mentioned all the ones I have done it is added externally at the mic socket. A kit of parts for the Chris Lorek, G4HCL design that appeared in HRT can be obtained from JAB Components, though they can no longer provide the PCB and use Veroboard instead. This design is based on the CML FX315 IC and is programmable via links/dip sw for single channel use or multi tone versions can use diodes and a rotary switch. Inject into the mic socket via a high value resistor 100k to 470k SOT.

Have the same unit inside my FT-480R powered from the repeater switch and using correct ctcss injection that is available at the small 4 pin socket on the underside of the radio. Again this could be mounted externally id a multi tone unit is desired.

Contact me direct if I can help further.

Regards,
Bob, G3VVT

38. is there a preamp for the ft-690rII

Yahoo group: electrichandbag
Date: 2008-05-17 23:36:50 UTC
From: John Wilson
Topic: 38 Message: 38

is there a preamp for the 690RII?
Imight try to fit the tentech in if someone is not currently making one.
John

39. Schematic (circuit diagram) for FT690

Yahoo group: electrichandbag
Date: 2008-05-25 12:16:43 UTC
From: Master Ice
Topic: 39 Message: 39

I have an ooooold ft690 - the really early version with AM but without the any repeater shifts.
At the moment I use the repeaters by storing them as a split in memory however I would like to get hold of a schematic (circuit diagram) for this early version so I can compare the switching between the FT690 and 690R to see if repeater shift is possible by simply changing the switch circuitry (and associated electronics)

So if anyone has a copy of the schematic for the standard 690 (not the 690R or MK2) I'd be really pleased if you can mail me a copy.

Many thanks

Slim G4IPZ

40. No transmit

Yahoo group: electrichandbag
Date: 2008-05-28 12:36:33 UTC
From: ross_penfold
Topic: 40 Message: 40

Hi all. I have a very old FT290r Mk1 which has just been taken out of storage after a house move. It was working ok when last used about 8 years ago but now it will not transmit in SSB and only transmits an unmodulated carrier in FM.
I'm thinking probably a dried up electrolytic in the audio stage, but before I attempt surgery I thought I would see if anyone else has had this problem. Any advice appreciated.
Cheers Ross G1COW

41. Re: No transmit

Yahoo group: electrichandbag
Date: 2008-05-28 20:08:57 UTC
From: Martin
Topic: 40 Message: 41

Hi Ross,

Have you checked that the microphone is working? It sounds like the PTT is operational, perhaps the mic element has failed, or a connection come loose in the plug. I would start there and work my way through the audio stages on FM, a dry joint or like you say a failed electrolytic would be my next suspects

Martin G7MRV

--- In electrichandbag@...m, "ross_penfold" <ross_penfold@...> wrote:
>
> Hi all. I have a very old FT290r Mk1 which has just been taken out of storage after a house move. It was working ok when last used about 8 years ago but now it will not transmit in SSB and only transmits an unmodulated carrier in FM.
> I'm thinking probably a dried up electrolytic in the audio stage, but before I attempt surgery I thought I would see if anyone else has had this problem. Any advice appreciated.
> Cheers Ross G1COW

42. Re: No transmit

Yahoo group: electrichandbag
Date: 2008-05-30 18:59:11 UTC
From: ross_penfold
Topic: 40 Message: 42

--- In electrichandbag@yahoogroups.com, "Martin" <barfield673@...> wrote:
>
> Hi Ross,
>
> Have you checked that the microphone is working? It sounds like the
> PTT is operational, perhaps the mic element has failed, or a
> connection come loose in the plug. I would start there and work my way
> through the audio stages on FM, a dry joint or like you say a failed
> electrolytic would be my next suspects
>
>
> Martin G7MRV
>
> --- In electrichandbag@yahoogroups.com, "ross_penfold"
> <ross_penfold@> wrote:
> >
> > Hi all. I have a very old FT290r Mk1 which has just been taken out of
> > storage after a house move. It was working ok when last used about 8
> > years ago but now it will not transmit in SSB and only transmits an
> > unmodulated carrier in FM.
> > I'm thinking probably a dried up electrolytic in the audio stage, but
> > before I attempt surgery I thought I would see if anyone else has had
> > this problem. Any advice appreciated.
> > Cheers Ross G1COW
>
Hi Martin
Thanks for the reply. I have tried 3 different microphones, so unless
I have been very unlucky I think that can be ruled out. Looks like a
case for major surgery.
73 Ross G1COW

43. Re: No transmit

Yahoo group: electrichandbag
Date: 2008-05-30 22:09:27 UTC
From: Martin
Topic: 40 Message: 43

right, so we can rule that out (assuming the mics used had the same pinouts)

It does then look like some internal investigations are needed. Do you have a audio signal generator you can use to feed a tone into the mic connection? that will be very much easier than using a mic, and of course a suitable dummy load. schematics etc can be found in the files section.

I would find a point on the main board to check the audio first, before dismantling the front panels, if the audio is present there that will rule out the front section and avoid the difficulty of dismantling. Im sure you will find either a dryjoint, bad track or a dry electrolytic

Martin

--- In electrichandbag@yahoogroups.com, "ross_penfold" <ross_penfold@...> wrote:
>
> --- In electrichandbag@yahoogroups.com, "Martin" <barfield673@> wrote:
> >
> > Hi Ross,
> >
> > Have you checked that the microphone is working? It sounds like the
> > PTT is operational, perhaps the mic element has failed, or a
> > connection come loose in the plug. I would start there and work my way
> > through the audio stages on FM, a dry joint or like you say a failed
> > electrolytic would be my next suspects
> >
> >
> > Martin G7MRV
> >
> > --- In electrichandbag@yahoogroups.com, "ross_penfold"
> > <ross_penfold@> wrote:
> > >
> > > Hi all. I have a very old FT290r Mk1 which has just been taken out of
> > > storage after a house move. It was working ok when last used about 8
> > > years ago but now it will not transmit in SSB and only transmits an

> > > unmodulated carrier in FM.
> > > I'm thinking probably a dried up electrolytic in the audio
stage, but
> > > before I attempt surgery I thought I would see if anyone else
has had
> > > this problem. Any advice appreciated.
> > > Cheers Ross G1COW
> >
> Hi Martin
> Thanks for the reply. I have tried 3 different microphones, so
unless
> I have been very unlucky I think that can be ruled out. Looks like
a
> case for major surgery.
> 73 Ross G1COW
>

44. Display help

Yahoo group: electrichandbag
Date: 2008-06-01 14:48:26 UTC
From: banavie2002
Topic: 44 Message: 44

Hi,
I am wondering if anyone has seen a fault like this before, and if a solution was found .....

At switch-on, most of the display segments are "lit". By pressing various buttons and moving controls some of the segments extinguish. If the radio is then cycled off/on it restarts witht those same segments on or off as appropriate.
The radio continues to receive/transmit at all times.
All voltages to and from the regulator board are well within any reasonable tolerance.
I can see control signals from the processor arriving at all the appropriate decoder chip pins and going on towards all the pins of the LCD.
I have reset the processor ....
I do not believe any of the input pins to the processor chip are "stuck".

Any clues as to cause?

Many thanks for your time and interest.

73,
Ron, G4IZS

45. Re: Display help

Yahoo group: electrichandbag
Date: 2008-06-04 16:25:49 UTC
From: Martin
Topic: 44 Message: 45

Hi Ron,

can you be more specific as to which controls cause the problem to show itself, and which dont? Most of the controls inputs go directly to the uP, which then controls the LCD driver, so in themselves shouldnt cause a problem, and are unlikely to pull down the supply rails, but a fault in the uP could be responsible. Does the set stay on frequency etc even though the display changes?

Ive been reading the replies youve had on another group about this, im not sure where the other fella got the 7808 regulator from! Can you confirm the version radio you have, im assuming a mk1 at the moment.

How far have you gone in your investigations? i would suggest reflowing the pins on the uP and the display driver, and inspecting the LCD for cracks or dirty contacts on the elastomer strip, to rule out bad connections or dry joints. Have you noted the effect on the display of pressing the front panel close to the controls but without actually pressing them? This would show up if the effect was caused by flexing the PCBs etc

Regards

Martin G7MRV

--- In electrichandbag@yahoogroups.com, "banavie2002" <ronald.sexton@...> wrote:
>
> Hi,
> I am wondering if anyone has seen a fault like this before, and if a
> solution was found .....
>
> At switch-on, most of the display segments are "lit". By pressing
> various buttons and moving controls some of the segments extinguish.
> If the radio is then cycled off/on it restarts witht those same
> segments on or off as appropriate.
> The radio continues to receive/transmit at all times.
> All voltages to and from the regulator board are well within any
> reasonable tolerance.
> I can see control signals from the processor arriving at all the
> appropriate decoder chip pins and going on towards all the pins of
> the LCD.
> I have reset the processor ....

> I do not believe any of the input pins to the processor chip
> are "stuck".
>
> Any clues as to cause?
>
> Many thanks for your time and interest.
>
> 73,
> Ron, G4IZS
>

46. Re: [electrichandbag] Re: Display help

Yahoo group: electrichandbag
Date: 2008-06-04 17:29:08 UTC
From: G4IZS
Topic: 44 Message: 46

Hi Martin,

Thanks for the reply ....

It very definitely is a MK 1 version, completely original, no Mutek ...., no messing about with broadbanding or anything. This is the first fault since purchase. No-one apart from me has been inside.

The display is "wrong" from initial switch-on. It would normally show a full set of "8's" but and this is a BIG but by fiddling with the buttons I can make the display change - not to anything meaningful though. A very few times I have actually managed to get most of the segments to go out which rather indicates there is nothing wrong at the display itself. If the radio is powered down and then switched on the display comes back with whatever it showed before (generally most segments "on"). The display is never, ever, "right".

Pressing here and there does nothing to change the display.

Now, interestingly(?), the receiver continues to receive and the transmitter transmit, and the frequencies change merrily under processor control. It is just that one has no idea where one is receiving or transmitting!

I do not believe it is the LCD .... I have been in and checked and (unnecessarily) cleaned the LCD elastomer connector. I have checked the display driver chip. Using a 'scope I can see data going on all lines to the display and also the data arriving at the decoder chip. I have re-flowed the joints at the decoder chip. I have buzzed through all lines to the point they arrive at the LCD itself. (I use a very low voltage "buzzer" designed to be safe!).

I have checked all the lines to and from the switches and all the connections through the connectors. No switches are stuck, all connections are good.

With regard to the processor I have checked all connections to the PCB looking for opens and shorts. The processor is clearly doing processing tasks anyway. At the very least it is controlling the synthesizer and in the other direction is sending data (possibly incorrect) to the decoder chip! It is not a battery problem. The lithium cell is happily providing its 3 volts to the right pins. The radio is operating on a bench supply at 12 volts.

Re-setting the processor according to the instruction manual has no effect. I found the processor data sheet and separately reset the processor - no effect.

I have checked the voltages around the processor and they would appear to be of the right order.

The radio changes frequency when the main tuning control is moved. The synthesizer is locked, the connections to the synthesizer are intact and have been checked .....

My conclusion is that a wandering alpha particle or two has disrupted the processor ROM in the display routine part of its program but of course, cannot be sure. It does seem odd the

processor seems to be processing merrily and chatting to the synthesiser.

Oh yes, and when front panel buttons are pressed the processor generally responds with bleeps on the wee sounder.

It is all a mystery ..... and - one positive thing - none of my activities seem to have made anything worse (or better!).

Thank you for your interest.

73

Ron G4IZS

----- Original Message -----
From: Martin
To: electrichandbag@yahoogroups.com
Sent: Wednesday, June 04, 2008 5:25 PM
Subject: [electrichandbag] Re: Display help

Hi Ron,

can you be more specific as to which controls cause the problem to show itself, and which dont? Most of the controls inputs go directly to the uP, which then controls the LCD driver, so in themselves shouldnt cause a problem, and are unlikely to pull down the supply rails, but a fault in the uP could be responsible. Does the set stay on frequency etc even though the display changes?

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Regards

Martin G7MRV

--- In electrichandbag@yahoogroups.com, "banavie2002"
<ronald.sexton@...> wrote:
>
> Hi,
> I am wondering if anyone has seen a fault like this before, and if
a
> solution was found .....
>

> At switch-on, most of the display segments are "lit". By pressing
> various buttons and moving controls some of the segments
extinguish.
> If the radio is then cycled off/on it restarts witht those same
> segments on or off as appropriate.
> The radio continues to receive/transmit at all times.
> All voltages to and from the regulator board are well within any
> reasonable tolerance.
> I can see control signals from the processor arriving at all the
> appropriate decoder chip pins and going on towards all the pins of
> the LCD.
> I have reset the processor ....
> I do not believe any of the input pins to the processor chip
> are "stuck".
>
> Any clues as to cause?
>
> Many thanks for your time and interest.
>
> 73,
> Ron, G4IZS
>

47. Re: Display help

Yahoo group: electrichandbag
Date: 2008-06-04 18:58:42 UTC
From: Martin
Topic: 44 Message: 47

Right, so everything is operational apart from the display itself, no dry joints, good elastomer, all voltages correct, clock and data evident.

Im afraid it sounds like the driver IC has problems. I agree that it could be a corrupt uP routine, but proving a uP fault is difficult. Changing one or the other would prove the diagnosis, either by fixing the fault or by shifting blame on the other device, but these chips will be hard to locate. I would suggest trying to change the display driver chip, as this is likely to be easier to find than the uP (which although the chips can be found they wont have the 290 firmware). It may be worth trying to get a scrap unit with a working display for spares, and i think this may be the only way to obtain them.

You could always strip the scrapper and offer the excess spares on here!

Let us know how you get on

Anyone out there got a scrapper to help Ron out?

--- In electrichandbag@yahoogroups.com, "G4IZS" <ronald.sexton@...> wrote:
>
> Hi Martin,
>
> Thanks for the reply ....
>
> It very definitely is a MK 1 version, completely original, no Mutek ...., no messing about with broadbanding or anything. This is the first fault since purchase. No-one apart from me has been inside.
>
> The display is "wrong" from initial switch-on. It would normally show a full set of "8's" but and this is a BIG but by fiddling with the buttons I can make the display change - not to anything meaningful though. A very few times I have actually managed to get most of the segments to go out which rather indicates there is nothing wrong at the display itself. If the radio is powered down and then switched on the display comes back with whatever it showed before (generally most segments "on"). The display is never, ever, "right".
>
> Pressing here and there does nothing to change the display.
>
> Now, interestingly(?), the receiver continues to receive and

the transmitter transmit, and the frequencies change merrily under processor control. It is just that one has no idea where one is receiving or transmitting!
>
> I do not believe it is the LCD .... I have been in and checked and (unnecessarily) cleaned the LCD elastomer connector. I have checked the display driver chip. Using a 'scope I can see data going on all lines to the display and also the data arriving at the decoder chip. I have re-flowed the joints at the decoder chip. I have buzzed through all lines to the point they arrive at the LCD itself. (I use a very low voltage "buzzer" designed to be safe!).
>
> I have checked all the lines to and from the switches and all the connections through the connectors. No switches are stuck, all connections are good.
>
> With regard to the processor I have checked all connections to the PCB looking for opens and shorts. The processor is clearly doing processing tasks anyway. At the very least it is controlling the synthesizer and in the other direction is sending data (possibly incorrect) to the decoder chip! It is not a battery problem. The lithium cell is happily providing its 3 volts to the right pins. The radio is operating on a bench supply at 12 volts.
>
> Re-setting the processor according to the instruction manual has no effect. I found the processor data sheet and separately reset the processor - no effect.
>
> I have checked the voltages around the processor and they would appear to be of the right order.
>
> The radio changes frequency when the main tuning control is moved. The synthesizer is locked, the connections to the synthesizer are intact and have been checked .....
>
> My conclusion is that a wandering alpha particle or two has disrupted the processor ROM in the display routine part of its program but of course, cannot be sure. It does seem odd the processor seems to be processing merrily and chatting to the synthesiser.
>
> Oh yes, and when front panel buttons are pressed the processor generally responds with bleeps on the wee sounder.
>
> It is all a mystery ..... and - one positive thing - none of my activities seem to have made anything worse (or better!).
>
> Thank you for your interest.
>
>

> 73
>
> Ron G4IZS
>
>
>
> ----- Original Message -----
> From: Martin
> To: electrichandbag@yahoogroups.com
> Sent: Wednesday, June 04, 2008 5:25 PM
> Subject: [electrichandbag] Re: Display help
>
>
> Hi Ron,
>
> can you be more specific as to which controls cause the problem
to
> show itself, and which dont? Most of the controls inputs go
directly
> to the uP, which then controls the LCD driver, so in themselves
> shouldnt cause a problem, and are unlikely to pull down the
supply
> rails, but a fault in the uP could be responsible. Does the set
stay
> on frequency etc even though the display changes?
>
> Ive been reading the replies youve had on another group about
this,
> im not sure where the other fella got the 7808 regulator from!
Can
> you confirm the version radio you have, im assuming a mk1 at the
> moment.
>
> How far have you gone in your investigations? i would suggest
> reflowing the pins on the uP and the display driver, and
inspecting
> the LCD for cracks or dirty contacts on the elastomer strip, to
rule
> out bad connections or dry joints. Have you noted the effect on
the
> display of pressing the front panel close to the controls but
> without actually pressing them? This would show up if the effect
was
> caused by flexing the PCBs etc
>
> Regards
>
> Martin G7MRV
>
> --- In electrichandbag@...m, "banavie2002"

> <ronald.sexton@> wrote:
> >
> > Hi,
> > I am wondering if anyone has seen a fault like this before,
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> > solution was found .....
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> > the LCD.
> > I have reset the processor ....
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> > are "stuck".
> >
> > Any clues as to cause?
> >
> > Many thanks for your time and interest.
> >
> > 73,
> > Ron, G4IZS
> >
>

48. Re: [electrichandbag] Re: Display help

Yahoo group: electrichandbag
Date: 2008-06-04 19:54:17 UTC
From: G4IZS
Topic: 44 Message: 48

Hi Martin,

I think that is about right. It is such a shame when in every other respect the radio is in good condition. It would be nice to find a scrap radio for spares. In the bitter end I am only looking for the processor and display driver boards - probably easier said than done. The radio is/was used by GM4YAT, my brother-in-law in Fort William for RayNet activities on the mountains and to help out for communications round other events in the area so it would have been nice but ....
I'll keep an eye on Ebay .... one day .... then it will be a few minutes work

73

Ron

----- Original Message -----
From: Martin
To: electrichandbag@yahoogroups.com
Sent: Wednesday, June 04, 2008 7:58 PM
Subject: [electrichandbag] Re: Display help

Right, so everything is operational apart from the display itself,
no dry joints, good elastomer, all voltages correct, clock and data
evident.

Im afraid it sounds like the driver IC has problems. I agree that it
could be a corrupt uP routine, but proving a uP fault is difficult.
Changing one or the other would prove the diagnosis, either by
fixing the fault or by shifting blame on the other device, but these
chips will be hard to locate. I would suggest trying to change the
display driver chip, as this is likely to be easier to find than the
uP (which although the chips can be found they wont have the 290
firmware). It may be worth trying to get a scrap unit with a working
display for spares, and i think this may be the only way to obtain
them.

You could always strip the scrapper and offer the excess spares on
here!

Let us know how you get on

Anyone out there got a scrapper to help Ron out?

--- In electrichandbag@yahoogroups.com, "G4IZS" <ronald.sexton@...>
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> The radio changes frequency when the main tuning control is
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>
> Ron G4IZS
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>
>
> ----- Original Message -----
> From: Martin
> To: electrichandbag@yahoogroups.com
> Sent: Wednesday, June 04, 2008 5:25 PM
> Subject: [electrichandbag] Re: Display help
>
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> im not sure where the other fella got the 7808 regulator from!
Can
> you confirm the version radio you have, im assuming a mk1 at the

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> without actually pressing them? This would show up if the effect
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> caused by flexing the PCBs etc
>
> Regards
>
> Martin G7MRV
>
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> <ronald.sexton@> wrote:
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> >
> > Any clues as to cause?
> >
> > Many thanks for your time and interest.

> >
> > 73,
> > Ron, G4IZS
> >
>

49. Display Help

Yahoo group: electrichandbag
Date: 2008-06-11 18:20:18 UTC
From: banavie2002
Topic: 49 Message: 49

Just thought I should mention I have now got the 290 working .... I purchased a second -290 on a well-known auction site, but since its rf performance was well down on the one I was repairing I decided to fault-find by substitution.
The result?
Well, it was not the processor but was the display chip, all in spite of all the signals to the display being present. Obviously something had scrambled the decoding logic process within the chip.
When I put the faulty board in the "new" radio the fault happily moved into it - therefore it is a positive diagnosis.....

You can all go wandering around Ben Nevis now and if you fall off you might be pleased to know an electrichandbag might be nearby.

73
Ron

50. Re: Display Help

Yahoo group: electrichandbag
Date: 2008-06-11 18:32:27 UTC
From: Martin
Topic: 49 Message: 50

smashing news ron, glad you got it sorted. And you have a carcass for spares now as well.

dont worry about mentioning ebay on here, we all know where you mean! most of my station was 2nd hand from there.

So, it was the driver chip, as we suspected. Obviously the data coming out was garbage rather than a dead line or two

Martin G7MRV

--- In electrichandbag@yahoogroups.com, "banavie2002" <ronald.sexton@...> wrote:
>
> Just thought I should mention I have now got the 290 working I
> purchased a second -290 on a well-known auction site, but since its
> rf performance was well down on the one I was repairing I decided to
> fault-find by substitution.
> The result?
> Well, it was not the processor but was the display chip, all in spite
> of all the signals to the display being present. Obviously something
> had scrambled the decoding logic process within the chip.
> When I put the faulty board in the "new" radio the fault happily
> moved into it - therefore it is a positive diagnosis.....
>
> You can all go wandering around Ben Nevis now and if you fall off you
> might be pleased to know an electrichandbag might be nearby.
>
> 73
> Ron
>

51. External PTT function

Yahoo group: electrichandbag
Date: 2008-06-19 20:59:00 UTC
From: david269140
Topic: 51 Message: 51

Has anyone modified the FT-290 Mk2 to provide an external PTT function?

73 David G4ASR

52. FT-290r help

Yahoo group: electrichandbag
Date: 2008-07-18 09:13:13 UTC
From: radiovintage2000
Topic: 52 Message: 52

Hi , Help me,
I wonder if anyone can tell me what the cure would be for a fault on a FT290R
When POWEN ON (a lot of time that he has been power-off) the S meter needle goes hard over to right (S9+20) and FT-290r will NOT TX or RX and frequency on display it is not linear , when the time has passed (60minuts) normal operation returns (s_meter go-to 0 and TX and rx is OK and turn frequency is linear .
I have already changed capacitor on REG-UNIT pb2239 , the defect appears when the RTX (FT290r) is power-off for over a half day.
I understand that an old rtx, can help me

Thank you For all , best Regards Francesco Cilea

53. How easy is it to change the backup memory battery?

Yahoo group: electrichandbag
Date: 2008-08-12 02:45:59 UTC
From: paulallans
Topic: 53 Message: 53

My memory backup battery has been dead for several years, so I was wondering how much work it was to change it.
IT seems to be wrapped in tape and stuck to the PCB board. It connects via two wires to another PCB. Before I remove it, is it a standard battery (such as a CR2032 with wires attached to it?)
page 11 hows activating the memory backup and leaving it on indefinitely, but I guess 20 years was too long.....

Also looking into my instruction manual on the same page it mentions on page 11 an "optional tone squelch unit" what was this and are they available?

54. Re: How easy is it to change the backup memory battery?

Yahoo group: electrichandbag
Date: 2008-08-13 10:46:50 UTC
From: g3vvt@aol.com
Topic: 53 Message: 54

In a message dated 13/08/08 10:07:59 GMT Daylight Time, paulallans@...
writes:

Also looking into my instruction manual on the same page it mentions on
page 11 an "optional tone squelch unit" what was this and are they
available?

Have to approach the changing of the memory battery myself so interested in
the mail on this. Normally a 3V lithium battery is used and though a normal CR
coin cell can be employed by direct soldering to the case, is better to use
a tagged cell of some kind.

My understanding of the tone squelch board was that it was offered for
certain markets, in lieu of the 1750Hz tone burst board, though only one can be
fitted in the location at the lower part of the case.

Some after market and mainly single channel CTCSS TX boards were available
at one time to install inside the case. However, this was not possible if the
SNLA-145sb RX preamp from Mutek has been fitted as they both need to occupy
the same space. The only solution that appears to be left under these
circumstances which I have made for several FT-290 and variants is to build up a
CTCSS tone board in a small external box, inserted in series with the microphone.
Can be powered from the radio with a switch to make it operation or not as
needed and a frequency selection switch can be fitted to this also. In the
case of the FT-290 series it is possible to pass the sub audible tones through
the microphone preamp/clipper (not possible with some radios), but can be
affected by the clipping action if set too low. A matter of compromise on the
CTCSS level. I normally run 250Hz deviation on the CTCSS, though for the FT-290
series this may have to be raised. A better option would be for the CTCSS to
go direct after the deviation control as per most amateur/pmr radios, though
unless the board can be internally mounted this may be difficult to access the
injection point.

The sales brochure for the FT-290/690/790 mk1 series plus Mutek preamp
information is in the files section of the group.

Regards,
Bob, G3VVT

55. Re: FT-290r help

Yahoo group: electrichandbag
Date: 2008-08-13 17:00:39 UTC
From: Martin
Topic: 52 Message: 55

Francesco,

I cant help at the moment, but my FT-290 mk1 fell to this fault today. However, i have not observed a return to normal after time.

I did however, check receive and transmit using a handheld nearby. The 290 will receive the handheld, and there is some transmit from the 290, although it must be mW as there is no indication on the SWR/PWR meter. When i have time i will rig it up to my Marconi 2955 test set and see what is really happening.

Martin G7MRV

--- In electrichandbag@yahoogroups.com, "radiovintage2000" <radiovintage2000@...> wrote:
>
> Hi , Help me,
> I wonder if anyone can tell me what the cure would be for a fault on a
> FT290R
> When POWEN ON (a lot of time that he has been power-off) the S
> meter needle goes hard over to right (S9+20) and FT-290r will NOT TX
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> I have already changed capacitor on REG-UNIT pb2239 , the defect
> appears when the RTX (FT290r) is power-off for over a half day.
> I understand that an old rtx, can help me
>
> Thank you For all , best Regards Francesco Cilea
>

56. Re: FT-290r help

Yahoo group: electrichandbag
Date: 2008-08-14 09:58:33 UTC
From: g3vvt@aol.com
Topic: 52 Message: 56

Hi Francesco,

I have seen exactly the same intermittent fault with a FT-290R mk1 I had to check, though for some reason the problem stopped, so never did get to find out why. Will check with Harry Leeming, G3LLL who is an expert on these early Yaesu radios to see if he can suggest a cause. I suspect that the PLL is going out of lock, though have not managed to prove this or why it should happen. There is always a suspicion that the electrolytic capacitors spread through the radio are failing with age. A much greater problem can occur when they leak, though with that the fault does not usually go away.

Sometime it can pay dividends to do what we used to call an "umbrella job" and replace all capacitors of a similar type that were known to cause problems. In early TVs the decoupling capacitors were a prime source of problems and was difficult to pick out which was causing the problem sometimes. Was cheaper for the customer in time to change all of them as the component cost was small. More recent TV the problem seems to have shifted to electrolytic capacitors with a resultant rise in popularity of the ESR meter to check the capacitor efficiency. Checking the measured value is not always the answer it would seem.

Regards,
Bob, G3VVT

57. Re: FT-290r help

Yahoo group: electrichandbag
Date: 2008-08-15 09:28:16 UTC
From: Martin
Topic: 52 Message: 57

Bob / Francesco,

I had mine on soak test overnight (on night shift so i could work on it). The fault cleared partially after being powered for about 20min (RX at 100dBm or better, but TX only 5-6mW). I found that blowing on the unit caused the fault to return. I concentrated in the region of Q1014, the AGC/ALC amp. If your suggestion of PLL out of lock was right, i wouldnt expect the S-meter to be driven over. Also, my unit would receive with the fault present if i increased the signal level to greater than 35dBm, and was on frequency, again something i would not expect with an out of lock PLL. Voltage tests on Q1014 (as best i could get the probes in!) showed a big change in the voltages between conditions. When working, collector voltage (and hence AGC rail) were between 1.8 - 3.5v aprox. with input signal from 0dBm to 115dBm. When the fault was present this was around 1v regardless of input, and seemed to 'float'. However, the -6.8v line to the emitter read about +5.6v! so investigations of the AVR are in order. However, i was working on internal battery and lost power after a while. I will test the AVR outputs when on PSU.

Unfortunatly, whilst investigating the cooling effect of blowing on the unit, i noticed the fault came back instantly if i blew on Q1001, the front end MOSFET. I rather foolishly placed a finger on it to gauge its temperature and my chair moved - moments later, the speaker stuttered, the RX LED flickered and went out, and the S-meter fell to zero, and its not received since! So, looks like ive probably a MOSFET to change as well now!

I fully agree with the idea of an umbrella swapout of the electrolytics. These are pretty cheap, and since changing a transistor in this machine involves a complete strip down, the caps may as well be changed as a matter of course at the same time.

So, my plan - test the AVR outputs, change Q1014, probably change Q1001, overhaul the electrolytics.

I'll post my findings in due course

Martin G7MRV

--- In electrichandbag@yahoogroups.com, g3vvt@... wrote:
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>
>
> I have seen exactly the same intermittent fault with a FT-290R mk1

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> capacitors with a resultant rise in popularity of the ESR meter
to check the
> capacitor efficiency. Checking the measured value is not always
the answer it would
> seem.
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> Regards,
> Bob, G3VVT
>

58. Re: FT-290r help

Yahoo group: electrichandbag
Date: 2008-08-15 19:21:56 UTC
From: Martin
Topic: 52 Message: 58

Phew! just soaked the radio on the bench PSU, its receiving again!
must have been a coincidence that the batteries went low around the
time i was checking the front end!

oh, and noticed that the S-meter switch is going bad, so that will
need fixing as well

Martin

--- In electrichandbag@yahoogroups.com, "Martin" <barfield673@...>
wrote:
>
> Bob / Francesco,
>
> I had mine on soak test overnight (on night shift so i could work
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> (RX at 100dBm or better, but TX only 5-6mW). I found that blowing
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>
> I fully agree with the idea of an umbrella swapout of the
> electrolytics. These are pretty cheap, and since changing a
> transistor in this machine involves a complete strip down, the
caps
> may as well be changed as a matter of course at the same time.
>
> So, my plan - test the AVR outputs, change Q1014, probably change
> Q1001, overhaul the electrolytics.
>
> I'll post my findings in due course
>
> Martin G7MRV
>
> --- In electrichandbag@yahoogroups.com, g3vvt@ wrote:
> >
> >
> > Hi Francesco,
> >
> >
> > I have seen exactly the same intermittent fault with a FT-290R
mk1
> I had to
> > check, though for some reason the problem stopped, so never did
> get to find
> > out why. Will check with Harry Leeming, G3LLL who is an expert
on
> these early
> > Yaesu radios to see if he can suggest a cause. I suspect that
the
> PLL is
> > going out of lock, though have not managed to prove this or why
it
> should happen.
> > There is always a suspicion that the electrolytic capacitors
> spread through
> > the radio are failing with age. A much greater problem can occur
> when they
> > leak, though with that the fault does not usually go away.
> >
> > Sometime it can pay dividends to do what we used to call
> an "umbrella job"
> > and replace all capacitors of a similar type that were known to
> cause problems.

> > In early TVs the decoupling capacitors were a prime source of
> problems and
> > was difficult to pick out which was causing the problem
> sometimes. Was cheaper
> > for the customer in time to change all of them as the component
> cost was
> > small. More recent TV the problem seems to have shifted to
> electrolytic
> > capacitors with a resultant rise in popularity of the ESR meter
> to check the
> > capacitor efficiency. Checking the measured value is not always
> the answer it would
> > seem.
> >
> > Regards,
> > Bob, G3VVT
> >
>

59. Re: [electrichandbag] FT-290r help

Yahoo group: electrichandbag
Date: 2008-08-16 07:20:56 UTC
From: Mansueto Grech
Topic: 52 Message: 59
Attachments: 2 described; binary payloads are missing from this source WARC

[Attachment content not displayed]

60. Re: FT-290r help

Yahoo group: electrichandbag
Date: 2008-08-16 17:32:21 UTC
From: Martin
Topic: 52 Message: 60

Mans,

thankyou for your info. I agree, it is most likely a poor/leaky electrolytic. Did changing the AGC capacitors solve the fault on your radio? Can you tell the group which number capacitors you changed?

I have just rebuilt my radio. I decided first of all to change Q1014 which is common to both AGC and ALC lines. Changing this has NOT cured the fault. Incidentally, this transistor is a 2SC2603E, and can be replaced with a BC547, with some repositioning of the legs.

Although i did not cure the fault, i have learnt many lessons on how to dismantle this radio! It is the hardest radio i have ever worked on, and i spent 5years repairing mobile radios!

I will change the capacitors next, but have first to change the capacitors on my Eddystone EB-35 mk1.

Martin G7MRV

--- In electrichandbag@yahoogroups.com, "Mansueto Grech" <mansueto.grech@...> wrote:
>
> Cioa Francesco,
> I have had the same problem not only with My rig but with several others.
> The problem seems to be a problem with leaky AGED Electrolytic Capacitors
> and poor quality PCB (looks like pressed cardboard). The effect this
> problem results in the AGC/AFC circuity behaving in this manner. As you
> well know the same components act as both AGC (on RX) and AFC (on TX).
>
> On mine I have to replace the electrolytic capacitor associated with the
> AGC/AFC circuitry and spraying an abundance of a contact cleaner (Tuner
> 600. Made by KONTACT and is a highly volatile and residue free contact
> cleaner spray Ideal for Electronic stuff mostly RF) to try and remove and
> leaked electrolyte that may have seeped into the PCB then I left it on for 3

> weeks day and night. After which, every now and then I switch it
on for a
> few hours Sometimes even a few days. In Practical Wireless
magazine there
> too was another cure consisting of adding a resistor to one of the
AGC/AFC
> circuitry, if memory does not fail me. But should have a copy of
it
> somewhere (tried it but did not work for me).
>
> Francesco I hope I was of some help and if you require further
assistance
> please do not hesitate to ask.
>
> Good Luck
>
> Mans. 9H1GB
>
> 2008/7/18 radiovintage2000 <radiovintage2000@...>
>
> > Hi , Help me,
> > I wonder if anyone can tell me what the cure would be for a
fault on a
> > FT290R
> > When POWEN ON (a lot of time that he has been power-off) the S
> > meter needle goes hard over to right (S9+20) and FT-290r will
NOT TX
> > or RX and frequency on display it is not linear , when the time
has
> > passed (60minuts) normal operation returns (s_meter go-to 0
and TX
> > and rx is OK and turn frequency is linear .
> > I have already changed capacitor on REG-UNIT pb2239 , the defect
> > appears when the RTX (FT290r) is power-off for over a half day.
> > I understand that an old rtx, can help me
> >
> > Thank you For all , best Regards Francesco Cilea
> >
> >
> >
>

61. Re: FT-290r help

Yahoo group: electrichandbag
Date: 2008-08-16 18:33:01 UTC
From: g3vvt@aol.com
Topic: 52 Message: 61

Hi Martin/Franchesco,

Had a reply from Harry Leeming, G3LLL regarding the problem and he sent me details of an article of his on the matter in Practical Wireless of August 2007. In the case of the RX, Q1014 is a common source of the problem and was resolved by adding a 47K between the base and emitter of the transistor (outer connections/collecter is centre). Martin, suggest you seek permission from PW to add this article to the group site as is very helpful in other directions. May also be the conductive glue syndrome in the VCO/PLL and problems with diodes D28,29 and 30 needing changing.

Can you both contact me direct off the group.

Regards,
Bob, G3VVT

62. Re: [electrichandbag] Re: FT-290r help

Yahoo group: electrichandbag
Date: 2008-08-17 09:32:39 UTC
From: Mansueto Grech
Topic: 52 Message: 62
Attachments: 2 described; binary payloads are missing from this source WARC

[Attachment content not displayed]

63. Re: FT-290r help

Yahoo group: electrichandbag
Date: 2008-08-17 10:51:08 UTC
From: Martin
Topic: 52 Message: 63

Mans,

My set only began to fail a few days ago, hopefully very little electrolyte has had time to leak.

I also replace electrolytics with 105deg types now when working on older equipment, i also up the working voltage to at least 35v to give a better failure margin.

Martin

--- In electrichandbag@yahoogroups.com, "Mansueto Grech" <mansueto.grech@...> wrote:
>
> Hi Martin,
> All noted.Don't remember from memory but I will have a look. I remember
> making a note of it on my schematic.
>
> Changing the electrolytic capacitor did not solve the problem completely.
> What really cure the problem long time was leaving it continuously on for a
> few weeks after spraying the part of the board were the electrolytic
> capacitor resided with the mentioned spray. this seem to have cleared the
> board of electrolyte residue.
>
> I have not used my radio for nearly 5 weeks, as part of the ongoing testing
> process, yesterday I switched both mine and my friend's my worked fine first
> go. My friends was fully functioning withing 30 secs. Not bad I think. but I
> will try to reduce this in my friend's radio.
>
> Later on I will have a look at the schematic and get back to the group with
> the capacitor's designation I replaced.
>
> BTY My new policy is to replace Electrolytic Capacitors with High
> Temperature Low ESR ones. A bit more expensive but worth the expanse in the
> long run.
>

> 73's all and good luck,
>
> Mans. 9H1GB
>

64. Re: FT-290r help

Yahoo group: electrichandbag
Date: 2008-08-18 10:19:26 UTC
From: g3vvt@aol.com
Topic: 52 Message: 64

In a message dated 18/08/08 09:37:11 GMT Daylight Time,
electrichandbag@yahoogroups.com writes:

I also replace electrolytics with 105deg types now when working on
older equipment, i also up the working voltage to at least 35v to
give a better failure margin.

Hi Martin,

The 105C type capacitors are a good idea and are widely available for TV/SW
mode PSU use, however, the idea of using at least 35V working types may not
be!

The reason for this is to do with how electrolytic capacitors work in that
they only apparently reach their marked capacity when the nominal working
voltage is reached. Can be significantly less when the capacitor is overated in
terms of voltage and under run. I was not aware of this until recently and the
subject came up whilst repairing a high current 13.5VDC power supply where
one of a pair of reservoir/smoothing capacitor had gone open circuit. Was
having great difficulty in sourcing suitable high value types with the correct
physical size, working voltage, capacitance and ripple current capability.
Despite being a currently manufactured power supply, the original capacitors
appeared to be obsolete and the Italian manufacturer Microset, steadfastly
refused to reply to my requests for information. A local amateur donated a pair of
tagged capacitors and eventually managed to source a similar screw type with
the needed 23mm screw spacing/overall height/can diameter from RS, though was
expensive and again at a higher working voltage than needed. At least the
Microset PT135 is up and running again. During the outage was given a superb
BNOS 40A metered 13.8VDC supply with a thermal runaway problem. Will use that
as the main shack supply once fixed. Having difficulty finding a circuit
diagram to assist in the repair so may have to work on it blind without any
information.

There is probably a formula for down rating capacitors to cover the
capacitance reduction effect when the operating voltage is under run as some times
with lower value capacitors it is difficult to source electrolytic capacitor
with the correct working voltage.

Would be interested to hear if anybody has circuit information for the BNOS
13.5V/13.8VDC PSU as have recently also aquired a 12A 13.8VDC current metered
version for service work. Always handy to have circuit information if they
ever have to be fixed.

Regards,
Bob, G3VVT

65. Re: FT-290r help

Yahoo group: electrichandbag
Date: 2008-08-18 11:22:06 UTC
From: Martin
Topic: 52 Message: 65

Thanks for the info Bob, now thats something i wasnt aware of,
despite over 10years in electronics/communications industry!

Oddly though, it seems that small case sizes are only easily
available in higher voltages? maybe due to supply quantities i
suppose. I would imagine that for small, non critical tasks the
difference is minor though.

Anyway, to business! I have just carried out the resistor fix as
mentioned in your PM to me. Its not too tricky but theres little
space between the emitter and collector connections, but there is
a 'channel' closeby on the board between solders that the resistor
can lay in, but it needs insulating!

At first glance, it really does seem to have fixed it! Ive now
turned the radio off and will not repower it for some time, while i
work on the Eddystone, to see if it has cured the fault when the
radio has had time to cool.

I will contact PW for permission to reproduce the article on the
list, i dont see any problem with that but if not will create a
diagram to post showing how to do the fix

Martin

--- In electrichandbag@yahoogroups.com, g3vvt@... wrote:
>
>
> In a message dated 18/08/08 09:37:11 GMT Daylight Time,
> electrichandbag@yahoogroups.com writes:
>
> I also replace electrolytics with 105deg types now when working
on
> older equipment, i also up the working voltage to at least 35v to
> give a better failure margin.
>
>
>
> Hi Martin,
>
> The 105C type capacitors are a good idea and are widely available
for TV/SW
> mode PSU use, however, the idea of using at least 35V working
types may not
> be!
>

> The reason for this is to do with how electrolytic capacitors work
in that
> they only apparently reach their marked capacity when the nominal
working
> voltage is reached. Can be significantly less when the capacitor
is overated in
> terms of voltage and under run. I was not aware of this until
recently and the
> subject came up whilst repairing a high current 13.5VDC power
supply where
> one of a pair of reservoir/smoothing capacitor had gone open
circuit. Was
> having great difficulty in sourcing suitable high value types
with the correct
> physical size, working voltage, capacitance and ripple current
capability.
> Despite being a currently manufactured power supply, the original
capacitors
> appeared to be obsolete and the Italian manufacturer Microset,
steadfastly
> refused to reply to my requests for information. A local amateur
donated a pair of
> tagged capacitors and eventually managed to source a similar
screw type with
> the needed 23mm screw spacing/overall height/can diameter from
RS, though was
> expensive and again at a higher working voltage than needed. At
least the
> Microset PT135 is up and running again. During the outage was
given a superb
> BNOS 40A metered 13.8VDC supply with a thermal runaway problem.
Will use that
> as the main shack supply once fixed. Having difficulty finding a
circuit
> diagram to assist in the repair so may have to work on it blind
without any
> information.
>
> There is probably a formula for down rating capacitors to cover
the
> capacitance reduction effect when the operating voltage is under
run as some times
> with lower value capacitors it is difficult to source
electrolytic capacitor
> with the correct working voltage.
>
> Would be interested to hear if anybody has circuit information for
the BNOS
> 13.5V/13.8VDC PSU as have recently also aquired a 12A 13.8VDC
current metered

> version for service work. Always handy to have circuit information
if they
> ever have to be fixed.
>
> Regards,
> Bob, G3VVT
>

66. Clarifier and Scan

Yahoo group: electrichandbag
Date: 2008-08-20 20:49:18 UTC
From: Geoff Pike
Topic: 66 Message: 66

Just to reming everyone that if the clarifier is on and you scan at the same time the 290 will scan +- 10 KHz, handy if you are transverting and the other person is off frequency.
regards
Geoff Pike
GI0GDP

67. FT690R repeater shift

Yahoo group: electrichandbag
Date: 2008-08-26 14:16:17 UTC
From: Master Ice
Topic: 67 Message: 67

does anyone know if there is any method by which the 1Mhz repeater shift can be altered to 600Khz for the UK 6M repeaters?
I'm presently using the memory split method but it is a pain in the b*tt.
Slim G4IPZ

68. Back to spec service

Yahoo group: electrichandbag
Date: 2008-09-11 14:50:17 UTC
From: NIGE
Topic: 68 Message: 68

I have a 290 that needs to be put back to spec. It is a little off frequency and the signal meter is not very responsive at all. Is there a shop/repair person in the UK who could do this for me. Thanks

69. Re: Back to spec service

Yahoo group: electrichandbag
Date: 2008-09-12 09:21:13 UTC
From: robialbion
Topic: 68 Message: 69

> I have a 290 that needs to be put back to spec. >
I have just had my FT290r series 1 serviced and put back on frequency (a little LF on SSB) and so forth - try Geoff at Castle Electronics on 01938 810778, quick, does a good job, fairly cheap and very good communication with a report of what has been done. He has also recently 'fixed' a friends 290r as well as my own 480r all with good results. Bear in mind though that the 290r built in meter is lazy, tends to be an 'on or off' indicator and thats about it! I tend to base sig reports on audibility rather than trust a dodgy meter!
73 de RobL - 2J0RZD

70. R: [electrichandbag] Re: FT-290r help

Yahoo group: electrichandbag
Date: 2008-10-27 12:32:12 UTC
From: Radio Vintage
Topic: 70 Message: 70

Dear BOB

You have an valid recent e_mail Address of Harry Leeming, G3LLL , I don't succeed in finding them .

the following G3LLL@..., harry@... are OLD

Tnx for Collabration
Frank

--- Gio 14/8/08, g3vvt@... <g3vvt@aol.com> ha scritto:

Da: g3vvt@... <g3vvt@...>
Oggetto: [electrichandbag] Re: FT-290r help
A: electrichandbag@yahoogroups.com
Data: Giovedì 14 agosto 2008, 11:58

Hi Francesco,

I have seen exactly the same intermittent fault with a FT-290R mk1 I had to check, though for some reason the problem stopped, so never did get to find out why. Will check with Harry Leeming, G3LLL who is an expert on these early Yaesu radios to see if he can suggest a cause. I suspect that the PLL is going out of lock, though have not managed to prove this or why it should happen. There is always a suspicion that the electrolytic capacitors spread through the radio are failing with age. A much greater problem can occur when they leak, though with that the fault does not usually go away.

Sometime it can pay dividends to do what we used to call an "umbrella job" and replace all capacitors of a similar type that were known to cause problems. In early TVs the decoupling capacitors were a prime source of problems and was difficult to pick out which was causing the problem sometimes. Was cheaper for the customer in time to change all of them as the component cost was small. More recent TV the problem seems to have shifted to electrolytic capacitors with a resultant rise in popularity of the ESR meter to check the capacitor efficiency. Checking the measured value is not always the answer it would seem.

Regards,
Bob, G3VVT

Scopri il blog di Yahoo! Mail:
Trucchi, novità e scrivi la tua opinione.
http://www.ymailblogit.com/blog

71. R: [electrichandbag] Re: FT-290r help

Yahoo group: electrichandbag
Date: 2008-10-28 08:51:27 UTC
From: robialbion
Topic: 70 Message: 71

Harry is a regular contributor in the magazine Practical Wireless, his published email address int he magazine is G3LLL@...

73 de RobL

> You have an valid recent Â e_mail Address of Harry Leeming, G3LLL ,
I don't succeed in finding them .

72. I just added a CTSS encoder to my FT290 mark 1

Yahoo group: electrichandbag
Date: 2008-11-08 21:27:46 UTC
From: paulallans
Topic: 72 Message: 72

I bought an SS-64-RDS from Communication Specialists for $38.95 plus
$6.50 shipping (US Dollars as I live in the US.)

It took less than 10 minutes to install and works fine.

This CTSS encoder board comes with an 8 inch ribbon cable to a
remotly mountable dip switch. It also includes the wire cable needed
to attatch it to the FT-290.

The following web page gave me the way to hook it up internally.
http://www.spikey-mike.com/radio/index.html

The page has nice pictures, It shows The 13 pin connector on the
regulator board (J01-P04 on the schematics) to use. I simply soldered
3 wires to the bottom of this connector (the pins protrude to the
solder side of the PCB)
pin 9 Tone gets the Yellow wire from the SS-64
pin 5 +6.8V gets the Red Wire from the SS-64
pin 8 GND gets the Black wire from the SS-64
That was it!
I uploaded pictures of my installation to the phot area of theis news
group.
My FT-290 has the pre-amp installed so I mounted the board covered in
selotape on top of the PCBs parallel with the case. See the photo and
trace the ribbon cable to the board.
Again tape keeps it nicely inplace so it doesn't move.

To buy the SS-64RDS go to:
http://www.com-spec.com/
http://www.com-spec.com/catalog/catalog.pdf
http://www.com-spec.com/nucat3.htm

I also put a new memory battery in the rig at the same time.

Paul.

:-)

73. Need Help to realign FT-690RII

Yahoo group: electrichandbag
Date: 2009-02-09 21:16:32 UTC
From: qrpcoqui
Topic: 73 Message: 73

Helllo to all in te group.
I just bought a Yaesu FT-690RII.
It's off frequency about 700hz on SSB. for EX:
For me to receive my friend or DX I have to tune
to 0.110.7 on the display. I need to know how
to realign the radio and what coil or VR or TC to tune and
also please let me know on what board of the radio, if it's on top
board or on the bottom board. Thanks

74. FT-690 Help

Yahoo group: electrichandbag
Date: 2009-02-15 19:56:10 UTC
From: spudnik144
Topic: 74 Message: 74

Hi

I have an FT-690 (not an FT-690R). It works well, except that regardless of which way I rotate the frequency control, the radio always goes up in frequency. That is, if I rotate clockwise, it increases in frequency, and if I rotate counter-clockwise, instead of decreasing in frequency it also increases in frequency.

I can use the up button on the microphone to increase frequency, and the down button decreases frequency, so that works OK, but I sure would like to be able to figure out how to fix the tuning knob on the radio itself.

Has anyone experienced this problem before?

Thanks

Wayne
VE3JJJ

75. Re: FT-690 Help

Yahoo group: electrichandbag
Date: 2009-02-15 21:52:15 UTC
From: Martin
Topic: 74 Message: 75

Hi Wayne, that sounds extremely annoying!

i would think most likely its the encoder, though i couldnt be sure.
Are you confident enough to dismantle the radio to repair? I would
check the connections for the encoder for dry joints (cold joints).
Its obviously not the synth as the buttons on the mike work ok.

Martin G7MRV

--- In electrichandbag@yahoogroups.com, "spudnik144"
<wjohnson144@...> wrote:
>
> Hi
>
> I have an FT-690 (not an FT-690R). It works well, except that
> regardless of which way I rotate the frequency control, the radio
> always goes up in frequency. That is, if I rotate clockwise, it
> increases in frequency, and if I rotate counter-clockwise, instead
of
> decreasing in frequency it also increases in frequency.
>
> I can use the up button on the microphone to increase frequency,
and
> the down button decreases frequency, so that works OK, but I sure
> would like to be able to figure out how to fix the tuning knob on
the
> radio itself.
>
> Has anyone experienced this problem before?
>
> Thanks
>
> Wayne
> VE3JJJ
>

76. Componant layout diagrams/photos?

Yahoo group: electrichandbag
Date: 2009-03-04 19:35:14 UTC
From: Martin
Topic: 76 Message: 76

Hi Guys,

does anyone have any componant layout diagrams for the FT-290mk1 main PCB? I found out today (when trying to reply to a call) that my FM Tx audio line has gone on the fritz, neither mic audio nor toneburst audio are present on Tx. Ive narrowed it down to the componants around the deviation control pot/varactor diode (which includes a suspicious electrolytic!), as these are the common parts on both audio lines, but cant easily identify these parts on the PCB

SSB audio line still works, so will have to work exclusively USB for the time being - vertical!

Martin G7MRV

77. Re: Componant layout diagrams/photos?

Yahoo group: electrichandbag
Date: 2009-03-04 20:05:25 UTC
From: Ebbe
Topic: 76 Message: 77

--- In electrichandbag@yahoogroups.com, "Martin" <barfield673@...> wrote:
>
> Hi Guys,
>
> does anyone have any componant layout diagrams for the FT-290mk1 main PCB? I found out today (when trying to reply to a call) that my FM Tx audio line has gone on the fritz, neither mic audio nor toneburst audio are present on Tx. Ive narrowed it down to the componants around the deviation control pot/varactor diode (which includes a suspicious electrolytic!), as these are the common parts on both audio lines, but cant easily identify these parts on the PCB
>
> SSB audio line still works, so will have to work exclusively USB for the time being - vertical!
>
>
> Martin G7MRV
>

Hi Martin.

I could upload it to You, but my UP-speed sucks, so get it from here:

http://www.download.n7tgb.net/yaesu/FT290/FT290R.pdf

Best regards, oz1esc, Ebbe

78. Re: [electrichandbag] Componant layout diagrams/photos?

Yahoo group: electrichandbag
Date: 2009-03-04 20:05:04 UTC
From: Steve Sheriff
Topic: 76 Message: 78

I've got the original handbook with schematics and component layout.
if you want copies let me know.

Steve

On 4 Mar 2009, at 19:35, Martin wrote:

> Hi Guys,
>
> does anyone have any componant layout diagrams for the FT-290mk1
> main PCB? I found out today (when trying to reply to a call) that my
> FM Tx audio line has gone on the fritz, neither mic audio nor
> toneburst audio are present on Tx. Ive narrowed it down to the
> componants around the deviation control pot/varactor diode (which
> includes a suspicious electrolytic!), as these are the common parts
> on both audio lines, but cant easily identify these parts on the PCB
>
> SSB audio line still works, so will have to work exclusively USB for
> the time being - vertical!
>
> Martin G7MRV
>
>
>

79. Re: Componant layout diagrams/photos?

Yahoo group: electrichandbag
Date: 2009-03-04 21:19:50 UTC
From: Martin
Topic: 76 Message: 79

Cheers fellas, I forgot they were in the manual!

I could really do with something more hi-res, showing all the componants, but i guess these will have to do. Since im only looking at a handful of parts it shouldnt be too much trouble to track them down

Martin

--- In electrichandbag@yahoogroups.com, Steve Sheriff <sheriff076@...> wrote:
>
> I've got the original handbook with schematics and component layout.
> if you want copies let me know.
>
> Steve
>
> On 4 Mar 2009, at 19:35, Martin wrote:
>
> > Hi Guys,
> >
> > does anyone have any componant layout diagrams for the FT-290mk1
> > main PCB? I found out today (when trying to reply to a call) that my
> > FM Tx audio line has gone on the fritz, neither mic audio nor
> > toneburst audio are present on Tx. Ive narrowed it down to the
> > componants around the deviation control pot/varactor diode (which
> > includes a suspicious electrolytic!), as these are the common parts
> > on both audio lines, but cant easily identify these parts on the PCB
> >
> > SSB audio line still works, so will have to work exclusively USB for
> > the time being - vertical!
> >
> > Martin G7MRV
> >
> >
> >
>

80. 50 members!

Yahoo group: electrichandbag
Date: 2009-03-15 20:29:17 UTC
From: Martin
Topic: 80 Message: 80

we've hit the 50 members milestone!

but, we need to start posting and discussing more! tell us about your experiences, how you use your 290s, whatever. Lets get talking!

Martin

81. FT290 and FT790 as satellite station

Yahoo group: electrichandbag
Date: 2009-03-16 07:07:01 UTC
From: oh6bi
Topic: 81 Message: 81

Hi All !

I have FT290 and 790, both R1 versions.
My plan is to make simple satellite station.
Installing both on "tray" which fits into briefcase
with small battery, maybe 10 Ah or so.

Any ideas for small antennas 2m/70cm enough to work
satellites and small to fit in briefcase ?

Anyone done similar before ?

73s de rami, oh6bi

82. Re: FT290 and FT790 as satellite station

Yahoo group: electrichandbag
Date: 2009-03-16 20:36:13 UTC
From: Martin
Topic: 81 Message: 82

Hi Rami,

sounds great, im planning a similar station to work the FM sats, using a VHF/UHF pair of ex-PMR radios. I plan to use the 'cheap LEO antenna' designs of WA5VJB

They can be found here http://wa5vjb.com/references.html

With a little thought they can be made as collapsible versions (mine will need to dismantle to be packed flat in the car)

Let us know how you get on, and plenty of pictures in the photos section please!

Martin

--- In electrichandbag@yahoogroups.com, "oh6bi" <oh6bi@...> wrote:
>
> Hi All !
>
> I have FT290 and 790, both R1 versions.
> My plan is to make simple satellite station.
> Installing both on "tray" which fits into briefcase
> with small battery, maybe 10 Ah or so.
>
> Any ideas for small antennas 2m/70cm enough to work
> satellites and small to fit in briefcase ?
>
> Anyone done similar before ?
>
> 73s de rami, oh6bi
>

83. Test

Yahoo group: electrichandbag
Date: 2009-03-17 18:19:27 UTC
From: melecerties
Topic: 83 Message: 83

Test

84. New member seeks info.

Yahoo group: electrichandbag
Date: 2009-03-16 23:37:56 UTC
From: Geoff Blake
Topic: 81 Message: 84

Hi,

Newbie to the group, but not to groups.

For those who don't know me, I am a newly retired electronics professional and a dyed-in-the-wool VHF and up type, more interested in 10GHz than 10 metres. I am quite proud to state tht in nearly 40 years licenced, I have had but 2 QSO's below 30MHz.

I have three FTx90's, all three are R2 models and these days the 290 is primarily used as an IF on 6cm and 23cm and the 790 as the IF on 3cm. I am not sure what I have the 690 for, but hey, the sunspots coming are back!

My other reason for this post is that my 790 is off frequency by about 3kHz and as I am going to great lengths to ensure that my transverter is pretty accurate on frequency (<100Hz), I need to adjust the 790 to get that close to frequency too.

Does anybody have the alignment instructions of the FT790R2 or know where I could get them. The same for the FT290R2 and FT690R2 would be useful too. If not, does anybody know which is the main tweak to bring the radio as a whole back on frequency, from the circuit diagram, there appears to be a variable inductor in series with XO2 which appears to be the prime LO source. Does anybody have any ideas before I leap in with a tweaker?

Thanks and 73 de Geoff
--
Geoff Blake G8GNZ located near Chelmsford, Essex, U.K.
Please reply to: geoff(at)palaemon(dot)demon(dot)co(dot)uk
Using Linux on Intel & Linux or NetBSD on Sun Sparc platforms

Please avoid sending me Word or PowerPoint attachments.
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of the sender.

---

85. Re: New member seeks info.

Yahoo group: electrichandbag
Date: 2009-03-18 23:11:08 UTC
From: g3vvt@aol.com
Topic: 81 Message: 85

Hi Geoff,

The Yaesu workshop manuals containing full alignment instructions are available for the FT290R2 and the FT690R2, but not the FT790R2 on CD from: _http://www.amateurmanuals.co.uk/_ (http://www.amateurmanuals.co.uk/) which is run by Geoff Brown, G4ICD/GJ4ICD. Have bought the Yaesu workshop manual for my FT480R from Geoff and found it to be of a good quality.

If I my memory is correct you may be right in the adjustment you mentioned as that seems similar with an FT290R that I had to get back on frequency. However, before any adjustment of anything it is important to check that all xtal oscillators are on their designated frequencies when checked with an accurate frequency counter fed from the appropriate test point for each oscillator with a low capacity high impedance probe. This is important as each can contribute to a frequency error and have noticed a gradual deterioration of xtals used in some of these radios.
Another excellent source of assistance for earlier Yaesu radio is Harry Leeming, G3LLL who is a goldmine when it comes to details on how to approach such problems. Harry's address for mail and email plus mobile phone number can be found in Practical Wireless on his regular column.

Regards,
Bob, G3VVT

86. Re: [electrichandbag] Re: New member seeks info.

Yahoo group: electrichandbag
Date: 2009-03-19 06:02:57 UTC
From: Geoff Blake
Topic: 81 Message: 86

On Wed, 18 Mar 2009 g3vvt@... wrote:

> Hi Geoff,
>
> The Yaesu workshop manuals containing full alignment instructions are
> available for the FT290R2 and the FT690R2, but not the FT790R2 on CD from:
> _http://www.amateurmanuals.co.uk/_ (http://www.amateurmanuals.co.uk/) which is run by
> Geoff Brown, G4ICD/GJ4ICD. Have bought the Yaesu workshop manual for my
> FT480R from Geoff and found it to be of a good quality.
>
> If I my memory is correct you may be right in the adjustment you mentioned
> as that seems similar with an FT290R that I had to get back on frequency.
> However, before any adjustment of anything it is important to check that all xtal
> oscillators are on their designated frequencies when checked with an
> accurate frequency counter fed from the appropriate test point for each oscillator
> with a low capacity high impedance probe. This is important as each can
> contribute to a frequency error and have noticed a gradual deterioration of xtals
> used in some of these radios.
> Another excellent source of assistance for earlier Yaesu radio is Harry
> Leeming, G3LLL who is a goldmine when it comes to details on how to approach such
> problems. Harry's address for mail and email plus mobile phone number can be
> found in Practical Wireless on his regular column.

Hi Bob, group,

Thank you for your reply Bob. Yes, I have just read somewhere, probably
in an old microwave newsletter that it is XO2 in both the FT-290R2 and the
FT-790R2 that requires adjustment to bring the frequency on the nose.

Measuring the frequency accurately is not a problem, currently my
frequency measurement uncertainty is around 1 part in 10^10 (GPSDO's
are wonderful!). The two other crystal oscillators I can spot on the
circuit diagram, 10.245 MHz and 13.5333 MHz, seem not to have any
provision for adjustment so it will be just a matter of checking those.

Thanks again,

Geoff
--
Geoff Blake G8GNZ located near Chelmsford, Essex, U.K.
Please reply to: geoff(at)palaemon(dot)demon(dot)co(dot)uk
Using Linux on Intel & Linux or NetBSD on Sun Sparc platforms

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of the sender.

---

87. Handbag strap

Yahoo group: electrichandbag
Date: 2009-03-26 17:26:29 UTC
From: gw7aav
Topic: 87 Message: 87

Hi everyone I am new to this group because I have just obtained and FT-290R for the princely sum of nothing. A work colleague was cleaning out his Father-in-Law's belongings after he passed away and found "some black boxes that might interest you" one of which was the 290. I consider myself quite lucky as it is all working including the back-light, it is in good condition and the telescopic antenna is only a little banana shaped. The leather case is good and the battery case only a little green.

I hope to use it to transvert to 4 metres and 23cm as I only have FM on theses bands at present and also to use it portable as my main interest these days is Summit on the Air. The one thing I am short of is the carry strap (part number R707600B) so if anyone has a spare they don't need or knows of one in someone's stock cupboard please let me know.

I would also like to know any recommendations on transverter kits for use with the 290.

Regards Steve GW7AAV

88. Re: [electrichandbag] Handbag strap

Yahoo group: electrichandbag
Date: 2009-03-26 18:53:50 UTC
From: Geoff Blake
Topic: 87 Message: 88

On Thu, 26 Mar 2009, gw7aav wrote:

> I hope to use it to transvert to 4 metres and 23cm as I only have FM on
> theses bands at present and also to use it portable as my main interest
> these days is Summit on the Air. The one thing I am short of is the
> carry strap (part number R707600B) so if anyone has a spare they don't
> need or knows of one in someone's stock cupboard please let me know.
>
> I would also like to know any recommendations on transverter kits for
> use with the 290.

Hi Steve,

Richard, G3CWI is quite keen on SOTA but on 10GHz. He uses a DB6NT transverter with a great deal of success. I am not into SOTA except from the "other end" point of view but also use DB6NT transverters on 23, 6 and 3cm. I think that they are as good as any and better than most.

Down East Microwave (DEMI) also have a good reputation and are lower in price.

The other alternative is to get a Microwave Modules transverter, but be careful to get a "good one".

I am sorry but cannot help you with 4m.

Geoff

--
Geoff Blake G8GNZ located near Chelmsford, Essex, U.K.
Please reply to: geoff(at)palaemon(dot)demon(dot)co(dot)uk
Using Linux on Intel & Linux or NetBSD on Sun Sparc platforms

Please avoid sending me Word or PowerPoint attachments.
See <http://www.gnu.org/philosophy/no-word-attachments.html>

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its attachments to any third party without the prior consent
of the sender.

---

89. New mods for the FT-290

Yahoo group: electrichandbag
Date: 2009-04-17 19:58:08 UTC
From: jm_santurio
Topic: 89 Message: 89

Hallo,

A new document is available in PDF format on Mods-DK web site: "A new life for the FT-290R", by F5RCT.

Interesting mods (I believe) and fine described inside.

The PI-filter + receiver sensitivity improvements, seems to be a good choice instead of the hard to find Mutek front-end module.

Would it be possible to make the PI-filter improvement without remove the internal antenna, despite a bit more losses due to the circuitry around L02 tore ?

Any opinion about that ??

73 de EA1EBJ

90. No FM deviation

Yahoo group: electrichandbag
Date: 2009-04-23 20:17:07 UTC
From: Martin
Topic: 90 Message: 90

ive come, finally, to spend some time trying to sort the lack of FM Tx deviation on my mk1 290.

I get neither speech audio nor toneburst, which puts the fault in the region of the FM VCO. The oscillator itself is running of course, as i get Tx power on frequency. Turning VR2002 right up gives a very faint ammount of modulation with the toneburst. Short of VR2002 itself being faulty (which i doubt) this only really leaves the parts around the varactor diode D05. This includes electrolytic cap C26 and a smattering of resistors.

What do you chaps suggest may be the culprit? My suspicion lies with C26. I intend to inject a 1kHz tone direct into the modulator and see what i get out. I dont want to be fiddling too much due to the sheer dificulty in working with the tightly packed board

Martin G7MRV

91. Re: No FM deviation

Yahoo group: electrichandbag
Date: 2009-04-24 11:02:27 UTC
From: Martin
Topic: 90 Message: 91

After literally 2hours ceasless fault finding, ive located the fault.

Tracing a fault in these things is none too easy, and requires a bit of lateral thinking because the part your trying to find is likely to be nowhere near where you'd expect it!

I traced the toneburst signal (nice and strong) using a 'scope, from pin 9 of the regulator board, where it follows a green wire to the main PCB by the mic amp (Q2004). At this point it gets very hard to find, as it seems to go then via a brown wire to the modulator, but i was getting no signal on this wire nor at any component around the modulator/level control VR2002.

So, i set about trying to find L01, which is the first component between the mic amp and the level control that is in series with the line. This turned out to be easier to find, as its a tubular black ferrite next to the terminal where the green wire came in, and its nice equally spaced pins were easy to locate. Testing on one side of this showed the signal, however scoping the other pin there was nothing! Desoldering and testing with a multimeter on low ohms showed it to be open circuit. This was confirmed by bridging its PCB pads with a wire, which restored operation!

So, L01 was the culprit. Its a 100mH sub-miniature inductor, and very small. Im running the rig with a temporary wire bypass, so will need to replace this inductor as soon as possible. Finding a replacement small enough to fit may prove tricky, i may have to try an SMT part.

So, that was the fix for my radio with this fault. Whether it will be the same fix for anyone else with these symptoms i dont know, but its a starting point if you find yourself with the same fault.

What we could really do with, is a component placement diagram. I dont think these exist, so one would have to be compiled by dismantling and mapping a dead radio. Now theres a job for someone!

Martin G7MRV

--- In electrichandbag@yahoogroups.com, "Martin" <barfield673@...> wrote:
>
> ive come, finally, to spend some time trying to sort the lack of FM Tx deviation on my mk1 290.
>
> I get neither speech audio nor toneburst, which puts the fault in the region of the FM VCO. The oscillator itself is running of course, as i get Tx power on frequency. Turning VR2002 right up gives a very faint ammount of modulation with the toneburst. Short of VR2002 itself being faulty (which i doubt) this only really leaves the parts around the varactor diode D05. This includes electrolytic cap C26 and a smattering of resistors.
>
> What do you chaps suggest may be the culprit? My suspicion lies with C26. I intend to inject a 1kHz tone direct into the modulator and see what i get out. I dont want to be

fiddling too much due to the sheer dificulty in working with the tightly packed board
>
>
> Martin G7MRV
>

92. Back-up battery supplier

Yahoo group: electrichandbag
Date: 2009-05-04 15:52:02 UTC
From: g8khs
Topic: 92 Message: 92

Hi all, does anyone know of a supplier that stocks suitable cells with tags please?

Many thanks - John G8KHS

93. Any CW users?

Yahoo group: electrichandbag
Date: 2009-05-14 16:40:55 UTC
From: Martin
Topic: 93 Message: 93

do any of our members use their 290 on CW?

Im hoping to start informal practice QSOs with a few friends shortly, were all very rusty but live practice is better than sending text extracts!

94. Re: [electrichandbag] Any CW users?

Yahoo group: electrichandbag
Date: 2009-05-14 16:55:00 UTC
From: Steve Sheriff
Topic: 93 Message: 94

I'll listen out but listening is all you'll get.... ;)
On 14 May 2009, at 17:40, Martin wrote:

>
>
> do any of our members use their 290 on CW?
>
> Im hoping to start informal practice QSOs with a few friends
> shortly, were all very rusty but live practice is better than
> sending text extracts!
>
>
>

95. National Field Day

Yahoo group: electrichandbag
Date: 2009-07-02 13:19:05 UTC
From: Martin
Topic: 95 Message: 95

This coming weekend (4-5th) is VHF National Field Day. The main contest runs 14:00 sat - 14:00 sun, those of you who are RSGB members may take part under the exact rules and submit your results, those of you (like me) who are not RSGB members can take part, just are not able to claim any prizes (but also are not limited to the terms of the rules). Report is RST + locator.

Im hoping to be /P somewhere on 2m SSB, using my FT-290mk1, 30W microwave modules linear amp and a DK7ZB style 3el beam on a 18ft mast, during saturday afternoon.

This is the ideal time to put those electric handbags to good use, and the weather looks good! so get out into those fields and hills, and have fun. Hopefully i will work some of you! Field day is a great experience whether on your own, as a small group or as part of a club event.

Martin G7MRV

96. 4th 144MHz Backpackers Contest Sunday 19th

Yahoo group: electrichandbag
Date: 2009-07-13 11:22:03 UTC
From: Martin
Topic: 96 Message: 96

This Sunday, 19th July, sees the 4th 14MHZ Backpackers contest.

There are two categories - 3w backpackers, and 10w Hilltoppers. See the RSGB website for rules and conditions.

Basically, backpackers must be portable, no more than 3W, and power independant. Hilltoppers can use 10W, and may operate from a stationary vehicle, but not with the engine running. There are also some limits on antennas.

The contest runs from 11 - 1500UTC (thats 12-4pm) and exchange is RST, serial, locator.

These contests are fun, and a great excuse to get out on the hills or fields with your FT-290's! I hope to work some of you this sunday

Martin

97. FT 290R

Yahoo group: electrichandbag
Date: 2009-07-19 14:42:51 UTC
From: interadd@btinternet.com
Topic: 97 Message: 97

Hi Guys

just taken delivery of a S/H FT290 that came with a car mounting kit, maplin powerpack and mic, (on lead to connect it to the powerpack) i need some advice regarding batteries, charger and 12 volt lead, i am taking my foundation licence next week so this is my first radio, after reading various reviews on the net i decided to go for the FT 290 as i mainly ride a motorcycle and this radio only cost me £60.

Thanks

Tim

98. Re: [electrichandbag] FT 290R

Yahoo group: electrichandbag
Date: 2009-07-19 19:28:15 UTC
From: Steve
Topic: 97 Message: 98

Hello Tim,
What specifics do you want to know?
The batteries are C cells 8 of 'em. They are charged from a 12v centre positve psu 200 ma I think.
The maplin power supply is for operation and is centre negative. I charge mine for about 12 hours.

What else can we help you with?

Sent from my iPod

73's G7TAO

On 19 Jul 2009, at 15:42, "interadd@..." <interadd@...
> wrote:

> Hi Guys
>
> just taken delivery of a S/H FT290 that came with a car mounting
> kit, maplin powerpack and mic, (on lead to connect it to the
> powerpack) i need some advice regarding batteries, charger and 12
> volt lead, i am taking my foundation licence next week so this is my
> first radio, after reading various reviews on the net i decided to
> go for the FT 290 as i mainly ride a motorcycle and this radio only
> cost me £60.
>
> Thanks
>
> Tim
>
>

99. Re: FT 290R

Yahoo group: electrichandbag
Date: 2009-07-19 21:31:22 UTC
From: Martin
Topic: 97 Message: 99

Hi Tim,

good luck with the foundation exam, im sure you will be on-air soon,

good man getting a 290, is it a mk1 or mk2?. They are nice rigs, and having SSB is great if you want to take part in SOTA or the backpackers contests, or work DX. They can go wrong, and are fiddly to work on, but are repairable. Theres a few common problems, but the fixes are well established now.

As Steve says, the Maplin PSU is for operating the radio. The power socket contains a switch which disconnects the batteries when on external power. I charge my batteries (4000mAhr NiMH's) in an external charger, but i can find out the details of the charge plug if you need them.

The only down sides to the FT-290 are the lack of CTCSS or DTMF for repeater and internet linking, but both of these can be solved with external add-on circuits. You are also limited to 3W (4-5W with 12v) so perhaps think of investing in a linear amp. The 30W microwave modules units are good and come up at decent prices.

Apart from contests (as today) or SOTA, my FT-290 stays monitoring 144.300 USB. Its also connected into my morse oscillator/switch box for CW.

Find yourself a simple mast (fibreglass fishing pole?) and a small beam antenna, that will fold down to fit panniers, and try SOTA. Combine a days playing radio on the hills with a good ride out.

Whats your location Tim? If your near enough, then once you get your license we could try for a sked

Regards

Martin G7MRV

--- In electrichandbag@yahoogroups.com, Steve <sheriff076@...> wrote:
>
> Hello Tim,
> What specifics do you want to know?
> The batteries are C cells 8 of 'em. They are charged from a 12v
> centre positve psu 200 ma I think.
> The maplin power supply is for operation and is centre negative. I
> charge mine for about 12 hours.
>
> What else can we help you with?
>
> Sent from my iPod
>
> 73's G7TAO

>
> On 19 Jul 2009, at 15:42, "interadd@..." <interadd@...
> > wrote:
>
> > Hi Guys
> >
> > just taken delivery of a S/H FT290 that came with a car mounting
> > kit, maplin powerpack and mic, (on lead to connect it to the
> > powerpack) i need some advice regarding batteries, charger and 12
> > volt lead, i am taking my foundation licence next week so this is my
> > first radio, after reading various reviews on the net i decided to
> > go for the FT 290 as i mainly ride a motorcycle and this radio only
> > cost me Â£60.
> >
> > Thanks
> >
> > Tim
> >
> >
>

100. Re: FT 290R

Yahoo group: electrichandbag
Date: 2009-07-21 10:54:16 UTC
From: robialbion
Topic: 97 Message: 100

Hi Tim

Probably not a lot more I can add other than to say the FT290r is a cracking little rig, the PW QRP 2metre contest has just passed for another year but is great fun with a 290r and a beam, as has been said, get yourself a beam, a portable one ideally (there are various patterns and guidance on the net, I use a 5 element yagi made out of a piece of PVCu sink waste pipe some weld rod and a roach pole, I've used it to work from here in the channel islands up into the Lake District and the borders before now as well as down into Spain in the right conditions). You will soon find with a foundation license you DON'T need big power and expensive radios to have BIG fun!! Let us know when you get licensed it would be a pleasure to work you, good luck.

PS - you won't be able to charge NiMH batteries in the rig, the charger only works for Ni-Cads so you'd need an external charger, the advantage though, Ni-MH will last for ages, using an external battery such as a sealed lead acid 7A and you can talk all weekend and run an external pre-amp!!

73 de RobL MJ0RZD

101. Re: FT 290R

Yahoo group: electrichandbag
Date: 2009-07-21 12:56:07 UTC
From: interadd@btinternet.com
Topic: 97 Message: 101

Hi Steve
Sorry taken a while to get back to you but been busy with the studying for the exam. I was not sure about powering the radio whilst portable, I guess if I buy nicads i can charge with the built in charge and if i get NiMH batteries then i will need an external charger. In the loft somewhere i have a 12 volt battery pack that i used for a video light when i done wedding videos a while back i will have yo try and find it.

Thanks for your help

73's Tim

102. Re: FT 290R

Yahoo group: electrichandbag
Date: 2009-07-21 17:47:30 UTC
From: Martin
Topic: 97 Message: 102

I think the internal charging connection is just a connection to the charge jack, i dont think theres an actual charger circuit inside (i will check that later), so you will need a suitable charger to plug in.

The DC supply plug is a bit of an oddity. The barrel size and the pin size are not a common standard, but a modern one can be made to fit with a drop of solder inside the hole. Steve will be best to advise on the plugs, as he can check out a good range of them for compatibility.

As Rob says, NiMHs will give you plenty of operating time, or a small SLAB (sealed lead acid battery) will give you ages. I use a 7Ahr because i happen to have a few, and charge it in an old UPS. For the really big events i have two deep discharge 38AHr SLABs, but need to get a charger sorted for those!

The 12v lighting pack should be ideal, and you probably already have a charger for it. Just a case of sorting a suitable plug, but remember to include a suitable fuse and holder.

My FT-290 played silly buggers with me on the backpack contest, which seems to be due to a pair of the batteries inside sagging and losing decent contact, so check that the foam inside the battery compartment is sound and keeps the batteries pressed in well.

Where are you located Tim?

Martin G7MRV

group owner, mod and general allround dogsbody

--- In electrichandbag@yahoogroups.com, "interadd@..." <interadd@...> wrote:
>
> Hi Steve
> Sorry taken a while to get back to you but been busy with the studying for the exam. I was not sure about powering the radio whilst portable, I guess if I buy nicads i can charge with the built in charge and if i get NiMH batteries then i will need an external charger. In the loft somewhere i have a 12 volt battery pack that i used for a video light when i done wedding videos a while back i will have yo try and find it.
>
> Thanks for your help
>
> 73's Tim
>

103. Editing PDFs?

Yahoo group: electrichandbag
Date: 2009-07-21 17:52:51 UTC
From: Martin
Topic: 103 Message: 103

Does any member have the ability to edit PDF files and split them? I have the FT-290R mk1 user manual as a PDF, but its 11MB, far too big to upload, as yahoo limit files to 5MB. If we could split it into three sections, say instructions, alignment procedures and schematics, we could have it in the files section.

Martin G7MRV

104. Re: [electrichandbag] Re: FT 290R

Yahoo group: electrichandbag
Date: 2009-07-21 17:57:54 UTC
From: Bt
Topic: 97 Message: 104

Hi Martin

I am located in Carlton colville near Lowestoft

Sent from my iPhone
Regards

Tim

On 21 Jul 2009, at 18:47, "Martin" <barfield673@...> wrote:

> I think the internal charging connection is just a connection to the
> charge jack, i dont think theres an actual charger circuit inside (i
> will check that later), so you will need a suitable charger to plug
> in.
>
> The DC supply plug is a bit of an oddity. The barrel size and the
> pin size are not a common standard, but a modern one can be made to
> fit with a drop of solder inside the hole. Steve will be best to
> advise on the plugs, as he can check out a good range of them for
> compatibility.
>
> As Rob says, NiMHs will give you plenty of operating time, or a
> small SLAB (sealed lead acid battery) will give you ages. I use a
> 7Ahr because i happen to have a few, and charge it in an old UPS.
> For the really big events i have two deep discharge 38AHr SLABs, but
> need to get a charger sorted for those!
>
> The 12v lighting pack should be ideal, and you probably already have
> a charger for it. Just a case of sorting a suitable plug, but
> remember to include a suitable fuse and holder.
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> My FT-290 played silly buggers with me on the backpack contest,
> which seems to be due to a pair of the batteries inside sagging and
> losing decent contact, so check that the foam inside the battery
> compartment is sound and keeps the batteries pressed in well.
>
> Where are you located Tim?
>
> Martin G7MRV
>
> group owner, mod and general allround dogsbody
>
> --- In electrichandbag@yahoogroups.com, "interadd@..."
> <interadd@...> wrote:
> >

> > Hi Steve
> > Sorry taken a while to get back to you but been busy with the
> studying for the exam. I was not sure about powering the radio
> whilst portable, I guess if I buy nicads i can charge with the built
> in charge and if i get NiMH batteries then i will need an external
> charger. In the loft somewhere i have a 12 volt battery pack that i
> used for a video light when i done wedding videos a while back i
> will have yo try and find it.
> >
> > Thanks for your help
> >
> > 73's Tim
> >
>
>

105. Re: [electrichandbag] Editing PDFs?

Yahoo group: electrichandbag
Date: 2009-07-21 18:00:25 UTC
From: kf7bsf@genedeal.com
Topic: 103 Message: 105

I can probably split it, but have you tried uploading it as a .zip file?

Gene/KF7BSF

On Jul 21, 2009, at 11:52 AM, Martin wrote:

> Does any member have the ability to edit PDF files and split them?
> I have the FT-290R mk1 user manual as a PDF, but its 11MB, far too
> big to upload, as yahoo limit files to 5MB. If we could split it
> into three sections, say instructions, alignment procedures and
> schematics, we could have it in the files section.
>
> Martin G7MRV
>
>
>

Gene Deal - KF7BSF
kf7bsf@...

106. Re: [electrichandbag] Editing PDFs?

Yahoo group: electrichandbag
Date: 2009-07-21 18:20:40 UTC
From: Geoff Blake
Topic: 103 Message: 106

On Tue, 21 Jul 2009, Martin wrote:

> Does any member have the ability to edit PDF files and split them? I
> have the FT-290R mk1 user manual as a PDF, but its 11MB, far too big to
> upload, as yahoo limit files to 5MB. If we could split it into three
> sections, say instructions, alignment procedures and schematics, we
> could have it in the files section.

If time is not important, I may be able to split the PDF under Linux, but
not for several weeks I am afraid.

Geoff

3X Mk 2 user

--
Geoff Blake G8GNZ located near Chelmsford, Essex, U.K.
Please reply to: geoff(at)palaemon(dot)demon(dot)co(dot)uk
Using Linux on Intel & Linux or NetBSD on Sun Sparc platforms

Please avoid sending me Word or PowerPoint attachments.
See <http://www.gnu.org/philosophy/no-word-attachments.html>

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its attachments to any third party without the prior consent
of the sender.

---

107. Re: [electrichandbag] Editing PDFs?

Yahoo group: electrichandbag
Date: 2009-07-21 19:22:59 UTC
From: interadd
Topic: 103 Message: 107

Hi Martin i can split if you need to i have the manual for the radio i have just bought, i think its the MK 2 model.

Tim

Martin wrote:

Does any member have the ability to edit PDF files and split them? I have the FT-290R mk1 user manual as a PDF, but its 11MB, far too big to upload, as yahoo limit files to 5MB. If we could split it into three sections, say instructions, alignment procedures and schematics, we could have it in the files section.

Martin G7MRV

108. Re: FT 290R

Yahoo group: electrichandbag
Date: 2009-07-21 19:45:02 UTC
From: Martin
Topic: 97 Message: 108

Thats maybe a bit far from me, im in Selby, North Yorkshire! But im sure we will have others closer by. That said, if you get into SOTA / portable working, its quite easily achieved on SSB to cover the distance.

Let us know how the exam goes

Martin G7MRV

--- In electrichandbag@yahoogroups.com, Bt <interadd@...> wrote:
>
> Hi Martin
>
> I am located in Carlton colville near Lowestoft
>
> Sent from my iPhone
> Regards
>
> Tim
>
> On 21 Jul 2009, at 18:47, "Martin" <barfield673@...> wrote:
>
> > I think the internal charging connection is just a connection to the
> > charge jack, i dont think theres an actual charger circuit inside (i
> > will check that later), so you will need a suitable charger to plug
> > in.
> >
> > The DC supply plug is a bit of an oddity. The barrel size and the
> > pin size are not a common standard, but a modern one can be made to
> > fit with a drop of solder inside the hole. Steve will be best to
> > advise on the plugs, as he can check out a good range of them for
> > compatibility.
> >
> > As Rob says, NiMHs will give you plenty of operating time, or a
> > small SLAB (sealed lead acid battery) will give you ages. I use a
> > 7Ahr because i happen to have a few, and charge it in an old UPS.
> > For the really big events i have two deep discharge 38AHr SLABs, but
> > need to get a charger sorted for those!
> >
> > The 12v lighting pack should be ideal, and you probably already have
> > a charger for it. Just a case of sorting a suitable plug, but
> > remember to include a suitable fuse and holder.
> >
> > My FT-290 played silly buggers with me on the backpack contest,
> > which seems to be due to a pair of the batteries inside sagging and
> > losing decent contact, so check that the foam inside the battery
> > compartment is sound and keeps the batteries pressed in well.

> >
> > Where are you located Tim?
> >
> > Martin G7MRV
> >
> > group owner, mod and general allround dogsbody
> >
> > --- In electrichandbag@yahoogroups.com, "interadd@"
> > <interadd@> wrote:
> > >
> > > Hi Steve
> > > Sorry taken a while to get back to you but been busy with the
> > studying for the exam. I was not sure about powering the radio
> > whilst portable, I guess if I buy nicads i can charge with the built
> > in charge and if i get NiMH batteries then i will need an external
> > charger. In the loft somewhere i have a 12 volt battery pack that i
> > used for a video light when i done wedding videos a while back i
> > will have yo try and find it.
> > >
> > > Thanks for your help
> > >
> > > 73's Tim
> > >
> >
> >
>

109. Re: Editing PDFs?

Yahoo group: electrichandbag
Date: 2009-07-21 19:49:44 UTC
From: Martin
Topic: 103 Message: 109

Link to the mk1 manual -http://www.radioamateur.eu/schemi/FT290R_user.pdf

if one of you chaps would be kind enough to split the file and post to our files section?

I did try as a zip file, but it only brought it down to 10.8MB!

Tim,

if your radio is a mk2, would you be able to post a copy of its manual also?

Martin G7MRV

110. FT-290R charge jack

Yahoo group: electrichandbag
Date: 2009-07-21 20:03:41 UTC
From: Martin
Topic: 97 Message: 110

Further to this, the charge jack on a mk1 connects directly to the internal batteries via a diode, so any charger will need to be capable of supplying the necessary voltage and current to charge the batteries correctly, taking into account the forward voltage of the diode. There is no charge controller circuit in the radio.

This refers to the mk1, the mk2 may be different.

Martin G7MRV

--- In electrichandbag@yahoogroups.com, "Martin" <barfield673@...> wrote:
>
> I think the internal charging connection is just a connection to the charge jack, i dont think theres an actual charger circuit inside (i will check that later), so you will need a suitable charger to plug in.
>
> The DC supply plug is a bit of an oddity. The barrel size and the pin size are not a common standard, but a modern one can be made to fit with a drop of solder inside the hole. Steve will be best to advise on the plugs, as he can check out a good range of them for compatibility.
>
> As Rob says, NiMHs will give you plenty of operating time, or a small SLAB (sealed lead acid battery) will give you ages. I use a 7Ahr because i happen to have a few, and charge it in an old UPS. For the really big events i have two deep discharge 38AHr SLABs, but need to get a charger sorted for those!
>
> The 12v lighting pack should be ideal, and you probably already have a charger for it. Just a case of sorting a suitable plug, but remember to include a suitable fuse and holder.
>
> My FT-290 played silly buggers with me on the backpack contest, which seems to be due to a pair of the batteries inside sagging and losing decent contact, so check that the foam inside the battery compartment is sound and keeps the batteries pressed in well.
>
> Where are you located Tim?
>
>
> Martin G7MRV
>
> group owner, mod and general allround dogsbody
>
> --- In electrichandbag@yahoogroups.com, "interadd@" <interadd@> wrote:
> >
> > Hi Steve
> > Sorry taken a while to get back to you but been busy with the studying for the exam. I was not sure about powering the radio whilst portable, I guess if I buy nicads i can charge with the built in charge and if i get NiMH batteries then i will need an external charger. In the loft somewhere i have a 12 volt battery pack that i used for a video light when i

done wedding videos a while back i will have yo try and find it.
> >
> > Thanks for your help
> >
> > 73's Tim
> >
>

111. New file uploaded to electrichandbag

Yahoo group: electrichandbag
Date: 2009-07-21 20:23:00 UTC
From: electrichandbag@yahoogroups.com
Topic: 2 Message: 111

Hello,

This email message is a notification to let you know that
a file has been uploaded to the Files area of the electrichandbag
group.

File : /FT290R_user.pdf
Uploaded by : interadd@... <interadd@...>
Description : User Manual

You can access this file at the URL:
http://groups.yahoo.com/group/electrichandbag/files/FT290R_user.pdf

To learn more about file sharing for your group, please visit:
http://help.yahoo.com/l/us/yahoo/groups/original/general.htmlfiles

Regards,

interadd@... <interadd@...>

112. Re: [electrichandbag] Re: Editing PDFs?

Yahoo group: electrichandbag
Date: 2009-07-21 20:26:46 UTC
From: interadd
Topic: 103 Message: 112

Martin wrote:

Link to the mk1 manual -http://www.radioamateur.eu/schemi/FT290R_user.pdf

if one of you chaps would be kind enough to split the file and post to our files section?

I did try as a zip file, but it only brought it down to 10.8MB!

Tim,

if your radio is a mk2, would you be able to post a copy of its manual also?

Martin G7MRV

Hi Martin

uploaded the manual, i am often in Cumbria for work Barrow in Furness so maybe we can contact.

Regards

Tim M6 (TBA)

113. New file uploaded to electrichandbag

Yahoo group: electrichandbag
Date: 2009-07-21 20:29:20 UTC
From: electrichandbag@yahoogroups.com
Topic: 2 Message: 113

Hello,

This email message is a notification to let you know that
a file has been uploaded to the Files area of the electrichandbag
group.

File : /4308_FT-290new-life.pdf
Uploaded by : interadd@... <interadd@...>
Description : New life for the FT-290

You can access this file at the URL:
http://groups.yahoo.com/group/electrichandbag/files/4308_FT-290new-life.pdf

To learn more about file sharing for your group, please visit:
http://help.yahoo.com/l/us/yahoo/groups/original/general.htmlfiles

Regards,

interadd@... <interadd@...>

114. New file uploaded to electrichandbag

Yahoo group: electrichandbag
Date: 2009-07-21 21:40:39 UTC
From: electrichandbag@yahoogroups.com
Topic: 2 Message: 114

Hello,

This email message is a notification to let you know that
a file has been uploaded to the Files area of the electrichandbag
group.

File : /FT-290R mk1 schematics/FT290Rmk1 schematics Part 1.doc
Uploaded by : zaktherabbit <barfield673@...>
Description :

You can access this file at the URL:
http://groups.yahoo.com/group/electrichandbag/files/FT-290R%20mk1%20schematics/FT290Rmk1%20schematics%20Part%201.doc

To learn more about file sharing for your group, please visit:
http://help.yahoo.com/l/us/yahoo/groups/original/general.htmlfiles

Regards,

zaktherabbit <barfield673@...>

115. Re: New file uploaded to electrichandbag

Yahoo group: electrichandbag
Date: 2009-07-21 21:48:17 UTC
From: Martin
Topic: 2 Message: 115

Thanks Tim for sorting the manual.

It seems that version is considerably smaller than mine, however, what may account for that is that mine includes the circuit diagrams. Ive managed to cut these and paste into a pair of word documents. Part 1 of the schematics i have just uploaded to the files area. Part 2 i will upload as soon as yahoo decides to let it work!

Martin G7MRV

--- In electrichandbag@yahoogroups.com, electrichandbag@yahoogroups.com wrote:
>
>
> Hello,
>
> This email message is a notification to let you know that
> a file has been uploaded to the Files area of the electrichandbag
> group.
>
> File : /FT-290R mk1 schematics/FT290Rmk1 schematics Part 1.doc
> Uploaded by : zaktherabbit <barfield673@...>
> Description :
>
> You can access this file at the URL:
> http://groups.yahoo.com/group/electrichandbag/files/FT-290R%20mk1%20schematics/FT290Rmk1%20schematics%20Part%201.doc
>
> To learn more about file sharing for your group, please visit:
> http://help.yahoo.com/l/us/yahoo/groups/original/general.htmlfiles
>
> Regards,
>
> zaktherabbit <barfield673@...>
>

116. Re: [electrichandbag] New file uploaded to electrichandbag

Yahoo group: electrichandbag
Date: 2009-07-22 08:05:29 UTC
From: Mansueto Grech
Topic: 2 Message: 116

Hi,
thanks for the scans. I downloaded the file to find that, at least mine
is, that page 4, the last or right hand side of the schematic, is blank.
Is it some thing I am doing wrong?

Thank again.

Mans. 9H1GB
electrichandbag@yahoogroups.com wrote:
>
>
>
> Hello,
>
> This email message is a notification to let you know that
> a file has been uploaded to the Files area of the electrichandbag
> group.
>
> File : /FT-290R mk1 schematics/FT290Rmk1 schematics Part 1.doc
> Uploaded by : zaktherabbit <barfield673@...
> <mailto:barfield673%40btinternet.com>>
> Description :
>
> You can access this file at the URL:
> http://groups.yahoo.com/group/electrichandbag/files/FT-290R%20mk1%20schematics/FT290Rmk1
%20schematics%20Part%201.doc
> <http://groups.yahoo.com/group/electrichandbag/files/FT-290R%20mk1%20schematics/FT290Rmk
1%20schematics%20Part%201.doc>
>
>
> To learn more about file sharing for your group, please visit:
> http://help.yahoo.com/l/us/yahoo/groups/original/general.htmlfiles
> <http://help.yahoo.com/l/us/yahoo/groups/original/general.htmlfiles>
>
> Regards,
>
> zaktherabbit <barfield673@...
> <mailto:barfield673%40btinternet.com>>
>
>
>

117. Re: New file uploaded to electrichandbag

Yahoo group: electrichandbag
Date: 2009-07-22 17:36:00 UTC
From: Martin
Topic: 2 Message: 117

Hi Mans,

No, its not you. The schematic so far uploaded is part 1, there should be 3 pages. If you have a blank page it will be just blank lines from how i copied the images into word. The remaining sections of the schematic are in part 2, but yahoo decided not to like me uploading that yesterday, i will try again today.

Note also that the pages overlap somewhat!

Martin G7MRV

--- In electrichandbag@yahoogroups.com, Mansueto Grech <mansueto.grech@...> wrote:
>
> Hi,
> thanks for the scans. I downloaded the file to find that, at least mine
> is, that page 4, the last or right hand side of the schematic, is blank.
> Is it some thing I am doing wrong?
>
> Thank again.
>
> Mans. 9H1GB
> electrichandbag@yahoogroups.com wrote:
> >
> >
> >
> > Hello,
> >
> > This email message is a notification to let you know that
> > a file has been uploaded to the Files area of the electrichandbag
> > group.
> >
> > File : /FT-290R mk1 schematics/FT290Rmk1 schematics Part 1.doc
> > Uploaded by : zaktherabbit <barfield673@...
> > <mailto:barfield673%40btinternet.com>>
> > Description :
> >
> > You can access this file at the URL:
> > http://groups.yahoo.com/group/electrichandbag/files/FT-290R%20mk1%20schematics/FT290Rmk1%20schematics%20Part%201.doc
> > <http://groups.yahoo.com/group/electrichandbag/files/FT-290R%20mk1%20schematics/FT290Rmk1%20schematics%20Part%201.doc>
> >
> >
> > To learn more about file sharing for your group, please visit:
> > http://help.yahoo.com/l/us/yahoo/groups/original/general.htmlfiles
> > <http://help.yahoo.com/l/us/yahoo/groups/original/general.htmlfiles>

> >
> > Regards,
> >
> > zaktherabbit <barfield673@...
> > <mailto:barfield673%40btinternet.com>>
> >
> >
> >
>

118. Re: New file uploaded to electrichandbag

Yahoo group: electrichandbag
Date: 2009-07-22 17:41:33 UTC
From: Martin
Topic: 2 Message: 118

Part 2 of the FT-290R mk1 schematics now uploaded

Martin G7MRV

--- In electrichandbag@yahoogroups.com, "Martin" <barfield673@...> wrote:
>
> Hi Mans,
>
> No, its not you. The schematic so far uploaded is part 1, there should be 3 pages. If you have a blank page it will be just blank lines from how i copied the images into word. The remaining sections of the schematic are in part 2, but yahoo decided not to like me uploading that yesterday, i will try again today.
>
> Note also that the pages overlap somewhat!
>
>
> Martin G7MRV
>
>
> --- In electrichandbag@yahoogroups.com, Mansueto Grech <mansueto.grech@> wrote:
> >
> > Hi,
> > thanks for the scans. I downloaded the file to find that, at least mine
> > is, that page 4, the last or right hand side of the schematic, is blank.
> > Is it some thing I am doing wrong?
> >
> > Thank again.
> >
> > Mans. 9H1GB
> > electrichandbag@yahoogroups.com wrote:
> > >
> > >
> > >
> > > Hello,
> > >
> > > This email message is a notification to let you know that
> > > a file has been uploaded to the Files area of the electrichandbag
> > > group.
> > >
> > > File : /FT-290R mk1 schematics/FT290Rmk1 schematics Part 1.doc
> > > Uploaded by : zaktherabbit <barfield673@
> > > <mailto:barfield673%40btinternet.com>>
> > > Description :
> > >
> > > You can access this file at the URL:

> > > http://groups.yahoo.com/group/electrichandbag/files/FT-290R%20mk1%20schematics/FT290Rmk1%20schematics%20Part%201.doc
> > > <http://groups.yahoo.com/group/electrichandbag/files/FT-290R%20mk1%20schematics/FT290Rmk1%20schematics%20Part%201.doc>
> > >
> > >
> > > To learn more about file sharing for your group, please visit:
> > > http://help.yahoo.com/l/us/yahoo/groups/original/general.htmlfiles
> > > <http://help.yahoo.com/l/us/yahoo/groups/original/general.htmlfiles>
> > >
> > > Regards,
> > >
> > > zaktherabbit <barfield673@
> > > <mailto:barfield673%40btinternet.com>>
> > >
> > >
> > >
> >
>

119. Re: [electrichandbag] Re: New file uploaded to electrichandbag

Yahoo group: electrichandbag
Date: 2009-07-22 20:39:56 UTC
From: interadd
Topic: 2 Message: 119

Martin wrote:

Thanks Tim for sorting the manual.

It seems that version is considerably smaller than mine, however, what may account for that is that mine includes the circuit diagrams. Ive managed to cut these and paste into a pair of word documents. Part 1 of the schematics i have just uploaded to the files area. Part 2 i will upload as soon as yahoo decides to let it work!

Martin G7MRV

--- In electrichandbag@yahoogroups.com, electrichandbag@yahoogroups.com wrote:
>
>
> Hello,
>
> This email message is a notification to let you know that
> a file has been uploaded to the Files area of the electrichandbag
> group.
>
> File : /FT-290R mk1 schematics/FT290Rmk1 schematics Part 1.doc
> Uploaded by : zaktherabbit ...>
> Description :
>
> You can access this file at the URL:
> http://groups.yahoo.com/group/electrichandbag/files/FT-290R%20mk1%20schematics/FT290Rmk1%20schematics%20Part%201.doc
>
> To learn more about file sharing for your group, please visit:
> http://help.yahoo.com/l/us/yahoo/groups/original/general.htmlfiles
>
> Regards,
>
> zaktherabbit ...>
>

Hi Martin

I passed the foundation licence this evening 22 out of 25 made simple mistakes on the 3 wrong answers.

Cheers

Tim

120. Re: New file uploaded to electrichandbag

Yahoo group: electrichandbag
Date: 2009-07-22 20:52:33 UTC
From: Martin
Topic: 2 Message: 120

Congratulations, well done. Let us know when you have your callsign issued.

so, time to start studying for the intermediate...

Martin G7MRV

121. Re: [electrichandbag] Re: New file uploaded to electrichandbag

Yahoo group: electrichandbag
Date: 2009-07-22 21:10:56 UTC
From: interadd
Topic: 2 Message: 121

Martin wrote:

Congratulations, well done. Let us know when you have your callsign issued.

so, time to start studying for the intermediate...

Martin G7MRV

Martin thinking of that already. I will lwt you know when i get my call sign.

Cheers

Tim

122. Re: [electrichandbag] Re: New file uploaded to electrichandbag

Yahoo group: electrichandbag
Date: 2009-07-22 23:30:34 UTC
From: Steve
Topic: 2 Message: 122

Congratulations Tim, keep in touch with the group.

Steve G7TAO

Sent from my iPod

On 22 Jul 2009, at 22:10, interadd <interadd@...> wrote:

> Martin wrote:
>
>>
>> Congratulations, well done. Let us know when you have your callsign
>> issued.
>>
>> so, time to start studying for the intermediate...
>>
>> Martin G7MRV
>>
> Martin thinking of that already. I will lwt you know when i get my
> call sign.
>
> Cheers
>
> Tim
>

123. FT-290R Service manual?

Yahoo group: electrichandbag
Date: 2009-07-23 06:03:16 UTC
From: ajfoxtrot
Topic: 123 Message: 123

Hi All,

I recently discovered this group after dusting off my trusty old FT-290R after some years stored way, and wonder if anyone has a link to a service manual? (prefereably free!)

Thanks & Cheers,

Tony VK2AJF
Sydney

124. Re: FT-290R Service manual?

Yahoo group: electrichandbag
Date: 2009-07-23 18:49:27 UTC
From: Martin
Topic: 123 Message: 124

Hi Tony,

Is it a mk1 or mk2?

An actual proper service manual (or technical bulletin as Yaesu seem to call them) is very rare, and ive never seen one. But, the 290 comes from an era when manufacturers still expected us to know what we were doing inside a radio, and to do much of the minor repair/realignment ourselves, so you will find that the mk1 manual recently uploaded here, along with the schematics, includes all the basic alignment procedures, as well as circuit descriptions, placement diagrams (admittedly poor) and parts lists

Do you have a fault? If so, mention it, we may be able to save you some faultfinding time

Martin G7MRV

--- In electrichandbag@yahoogroups.com, "ajfoxtrot" <TonyAJF@...> wrote:
>
> Hi All,
>
> I recently discovered this group after dusting off my trusty old FT-290R after some years stored way, and wonder if anyone has a link to a service manual? (prefereably free!)
>
> Thanks & Cheers,
>
> Tony VK2AJF
> Sydney
>

125. Re: [electrichandbag] Re: New file uploaded to electrichandbag

Yahoo group: electrichandbag
Date: 2009-07-23 14:59:58 UTC
From: Mansueto Grech
Topic: 2 Message: 125

Hi Martin,
Yes all noted. The over large overlapping is a very goo idea as
something putting them together is very difficult. In this way both
pages can be trimmed and thus match better.

BTY. is there a PCB layout or service manual for the Mk1???
I need to make a few repairs on mine but my eyesight is not as sharp as
it used to be.... I will not write what my friend version of the cause
was, but you can imagine HI HI HI.

73's and Thanks

Mans. 9H1GB

Martin wrote:
>
>
> Hi Mans,
>
> No, its not you. The schematic so far uploaded is part 1, there should
> be 3 pages. If you have a blank page it will be just blank lines from
> how i copied the images into word. The remaining sections of the
> schematic are in part 2, but yahoo decided not to like me uploading
> that yesterday, i will try again today.
>
> Note also that the pages overlap somewhat!
>
> Martin G7MRV
>
> --- In electrichandbag@yahoogroups.com
> <mailto:electrichandbag%40yahoogroups.com>, Mansueto Grech
> <mansueto.grech@...> wrote:
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> > Hi,
> > thanks for the scans. I downloaded the file to find that, at least mine
> > is, that page 4, the last or right hand side of the schematic, is
> blank.
> > Is it some thing I am doing wrong?
> >
> > Thank again.
> >
> > Mans. 9H1GB
> > electrichandbag@yahoogroups.com
> <mailto:electrichandbag%40yahoogroups.com> wrote:
> > >
> > >

> > >
> > > Hello,
> > >
> > > This email message is a notification to let you know that
> > > a file has been uploaded to the Files area of the electrichandbag
> > > group.
> > >
> > > File : /FT-290R mk1 schematics/FT290Rmk1 schematics Part 1.doc
> > > Uploaded by : zaktherabbit <barfield673@...
> > > <mailto:barfield673%40btinternet.com>>
> > > Description :
> > >
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> http://groups.yahoo.com/group/electrichandbag/files/FT-290R%20mk1%20schematics/FT290Rmk1
%20schematics%20Part%201.doc
> <http://groups.yahoo.com/group/electrichandbag/files/FT-290R%20mk1%20schematics/FT290Rmk
1%20schematics%20Part%201.doc>
>
> > >
> <http://groups.yahoo.com/group/electrichandbag/files/FT-290R%20mk1%20schematics/FT290Rmk
1%20schematics%20Part%201.doc
> <http://groups.yahoo.com/group/electrichandbag/files/FT-290R%20mk1%20schematics/FT290Rmk
1%20schematics%20Part%201.doc>>
>
> > >
> > >
> > > To learn more about file sharing for your group, please visit:
> > > http://help.yahoo.com/l/us/yahoo/groups/original/general.htmlfiles
> <http://help.yahoo.com/l/us/yahoo/groups/original/general.htmlfiles>
> > >
> <http://help.yahoo.com/l/us/yahoo/groups/original/general.htmlfiles
> <http://help.yahoo.com/l/us/yahoo/groups/original/general.htmlfiles>>
> > >
> > > Regards,
> > >
> > > zaktherabbit <barfield673@...
> > > <mailto:barfield673%40btinternet.com>>
> > >
> > >
> > >
> >
>
>

126. Re: [electrichandbag] Re: FT-290R Service manual?

Yahoo group: electrichandbag
Date: 2009-07-24 06:35:57 UTC
From: Tony Farrow
Topic: 123 Message: 126

Hello Martin,

Thanks for the response. My rig just has FT-290R stamped on it, so it must be a Mark I. It appears to be still working OK, but in view of its age I thought I would be a good boy scout and be prepared with some documentation!

Incidentally my Word 2003 wouldn't open the first document containing the schematics at electrichandbag, but I did eventually find some schematics at http://www.w1ngl.us/radios/ft290r/

Thanks & Best Wishes,

Tony VK2AJF
Sydney

2009/7/24 Martin <barfield673@...>

>
>
> Hi Tony,
>
> Is it a mk1 or mk2?
>
> An actual proper service manual (or technical bulletin as Yaesu seem to
> call them) is very rare, and ive never seen one. But, the 290 comes from an
> era when manufacturers still expected us to know what we were doing inside a
> radio, and to do much of the minor repair/realignment ourselves, so you will
> find that the mk1 manual recently uploaded here, along with the schematics,
> includes all the basic alignment procedures, as well as circuit
> descriptions, placement diagrams (admittedly poor) and parts lists
>
> Do you have a fault? If so, mention it, we may be able to save you some
> faultfinding time
>
> Martin G7MRV
>
>
> --- In electrichandbag@yahoogroups.com <electrichandbag%40yahoogroups.com>,
> "ajfoxtrot" <TonyAJF@...> wrote:
> >
> > Hi All,
> >
> > I recently discovered this group after dusting off my trusty old FT-290R
> after some years stored way, and wonder if anyone has a link to a service
> manual? (prefereably free!)
> >

> > Thanks & Cheers,
> >
> > Tony VK2AJF
> > Sydney
> >
>
>
>

127. Re: FT-290R Service manual?

Yahoo group: electrichandbag
Date: 2009-07-24 22:31:03 UTC
From: Martin
Topic: 123 Message: 127

Hi Tony,

yes its good to be prepared. It sounds like a mk1, the mk1 and mk2 look very different! The mk1 is the type whos picture is the groups title image. I will arrange some comparison photos in the photos sections when i can

The files were made in word 97. I do think there is some compatability issue with word 2003, but later versions seem ok.

The schematics are images pasted into text boxes, so if anyone on the group is a whiz with image software and would care to stitch them into a nice jpg or the like....

Martin G7MRV

--- In electrichandbag@yahoogroups.com, Tony Farrow <TonyAJF@...> wrote:
>
> Hello Martin,
>
> Thanks for the response. My rig just has FT-290R stamped on it, so it must
> be a Mark I. It appears to be still working OK, but in view of its age I
> thought I would be a good boy scout and be prepared with some documentation!
>
>
> Incidentally my Word 2003 wouldn't open the first document containing the
> schematics at electrichandbag, but I did eventually find some schematics at
> http://www.w1ngl.us/radios/ft290r/
>
> Thanks & Best Wishes,
>
> Tony VK2AJF
> Sydney
>
>
> 2009/7/24 Martin <barfield673@...>
>
> > >
> > >
> > > Hi Tony,
> > >
> > > Is it a mk1 or mk2?
> > >
> > > An actual proper service manual (or technical bulletin as Yaesu seem to
> > > call them) is very rare, and ive never seen one. But, the 290 comes from an
> > > era when manufacturers still expected us to know what we were doing inside a
> > > radio, and to do much of the minor repair/realignment ourselves, so you will
> > > find that the mk1 manual recently uploaded here, along with the schematics,

> > includes all the basic alignment procedures, as well as circuit
> > descriptions, placement diagrams (admittedly poor) and parts lists
> >
> > Do you have a fault? If so, mention it, we may be able to save you some
> > faultfinding time
> >
> > Martin G7MRV
> >
> >
> > --- In electrichandbag@yahoogroups.com <electrichandbag%40yahoogroups.com>,
> > "ajfoxtrot" <TonyAJF@> wrote:
> > >
> > > Hi All,
> > >
> > > I recently discovered this group after dusting off my trusty old FT-290R
> > after some years stored way, and wonder if anyone has a link to a service
> > manual? (prefereably free!)
> > >
> > > Thanks & Cheers,
> > >
> > > Tony VK2AJF
> > > Sydney
> > >
> >
> >
> >
>

128. Re: [electrichandbag] Re: New file uploaded to electrichandbag

Yahoo group: electrichandbag
Date: 2009-07-27 19:54:04 UTC
From: Bt
Topic: 2 Message: 128

Hi martin

Got my call sign today M6VFR. Can you tell
me where the best activity is on 2 mts sideband
It's a bit quite here in rural suffolk.

Regards

Tim

On 22 Jul 2009, at 21:52, "Martin" <barfield673@...> wrote:

> Congratulations, well done. Let us know when you have your callsign
> issued.
>
> so, time to start studying for the intermediate...
>
> Martin G7MRV
>
>

129. Re: New file uploaded to electrichandbag

Yahoo group: electrichandbag
Date: 2009-07-27 22:31:34 UTC
From: Martin
Topic: 2 Message: 129

Nice callsign, you'll have all the pilots envious of that! (VFR - visual flight rules)

SSB can often be very dead, until conditions pick up. 144.300 is the calling frequency, so it is best to monitor there. SSB Activity will typically be found either side of the calling frequency from 144.150 to 144.400, with various specialist modes dotted about. Above .400 up to .490 you will find propagation beacons. Try listening to .430 for the GB3VHF beacon from Wrotham in Kent.

The main thing to remember is that virtually all SSB activity is horizontally polarized, and beam antennas are the norm. You may be lucky to work locally with the whip on the radio, but you really need something horizontal. I dont know what antennas you have of course. A very simple, quick and dirty way of getting horizontal but with an omnidirectional pattern is the halo. This is what im using until i can get someone to hold the ladders! If you can get a beam up, try aiming south-east, towards holland, being in suffolk this part of europe should be within your reach

A good thing to do is to try and get involved in one of the 2m contests. These mostly use SSB and are geared towards QRP stations. There is one on 1st august. Look on the RSGB website under contests.

Above all, have fun and get on-air! Call CQ a lot (but listen a lot as well!) The more you call, the more likely you will be heard and the sooner you will make contacts

Regards

Martin G7MRV

--- In electrichandbag@yahoogroups.com, Bt <interadd@...> wrote:
>
> Hi martin
>
> Got my call sign today M6VFR. Can you tell
> me where the best activity is on 2 mts sideband
> It's a bit quite here in rural suffolk.
>
> Regards
>
> Tim
>
> On 22 Jul 2009, at 21:52, "Martin" <barfield673@...> wrote:
>
> > Congratulations, well done. Let us know when you have your callsign
> > issued.
> >
> > so, time to start studying for the intermediate...
> >
> > Martin G7MRV

> >
> >
>

130. /P on Yorkshire Dales tomorrow 28th

Yahoo group: electrichandbag
Date: 2009-07-27 22:35:16 UTC
From: Martin
Topic: 130 Message: 130

Hi All,

I will be walking above Appletreewick on the Yorkshire Dales tomorrow, and around lunchtime i should have time to play a bit of radio. Im only taking my Alinco handheld, so will be on FM, but i will put a few CQ's out and see what happens

Martin G7MRV

131. Re: New file uploaded to electrichandbag

Yahoo group: electrichandbag
Date: 2009-07-28 12:32:22 UTC
From: robialbion
Topic: 2 Message: 131

> Got my call sign today M6VFR.

Hi Tim
Congratulations on your new callsign, get your beam sorted out and get calling!! Let me know if you want a sked into the channel islands!

73 de RobL MJ0RZD

132. Loud Clicking noise

Yahoo group: electrichandbag
Date: 2009-08-11 18:43:48 UTC
From: kellyrichard16
Topic: 132 Message: 132

Hi Everyone, I am new to the group and thank you for letting me join.

I have a slight problem with my ft-290r mk1 you might be able to help me with.

When i key and unkey the mike their is a loud click from the speaker, even with the volume

control turned fully anti-clockwise it is still prominent. Mode positions or different power levels

make no difference. Hope someone can offer an explanation. Thank You in advance.

Richard (gm0grd)

133. S Meter Full Scale Deflection at switch on - AGC Problem?

Yahoo group: electrichandbag
Date: 2009-08-11 10:49:44 UTC
From: Mick
Topic: 133 Message: 133

Hi,

Has anyone any experience with S Meter FSD at switch on and deaf Rx, seems to improve if left powered on for a while.

I am guessing this is an AGC problem, does anyone knowof any common causes to check?

Cheers

Mick
G1EUZ

134. Re: Loud Clicking noise

Yahoo group: electrichandbag
Date: 2009-08-11 20:02:59 UTC
From: Martin
Topic: 132 Message: 134

Hi Richard, welcome to the group,

That sounds to me like there is a DC level on the speaker from somewhere. You could check for that with a meter. Be careful opeing the radio up, the speaker lead is hardwired and not very long.

Where that level is coming from though, i'll have to think about that! could be a leaky electrolytic blocking cap, whats the audio like?

Martin G7MRV

--- In electrichandbag@yahoogroups.com, "kellyrichard16" <richard.gm0grd@...> wrote:
>
>
> Hi Everyone, I am new to the group and thank you for letting me join.
>
> I have a slight problem with my ft-290r mk1 you might be able to help me
> with.
>
> When i key and unkey the mike their is a loud click from the speaker,
> even with the volume
>
> control turned fully anti-clockwise it is still prominent. Mode
> positions or different power levels
>
> make no difference. Hope someone can offer an explanation. Thank You in
> advance.
>
> Richard (gm0grd)
>

135. Re: S Meter Full Scale Deflection at switch on - AGC Problem?

Yahoo group: electrichandbag
Date: 2009-08-12 13:28:20 UTC
From: g3vvt@aol.com
Topic: 133 Message: 135

In a message dated Tue Aug 11, 2009 1:00 pm ((PDT)) "Mick"
mickhannam@... mickhannam writes:

Hi,

Has anyone any experience with S Meter FSD at switch on and deaf Rx, seems to improve if left powered on for a while.

I am guessing this is an AGC problem, does anyone know of any common causes to check?

Cheers

Mick
G1EUZ

Hi Mick,

There was an article in PW August 2007 in Harry, G3LLL's column on the subject with a modification to clear the problem. Also I believe ageing electrolytics can play a part in the problem. Have also seen a similar problem where this is coupled with very low FM TX power at switch on that comes normal as the radio is used. Never got as far as checking on SSB for the same problem.

Regards,
Bob, G3VVT

136. Re: S Meter Full Scale Deflection at switch on - AGC Problem?

Yahoo group: electrichandbag
Date: 2009-08-12 16:30:06 UTC
From: Martin
Topic: 133 Message: 136

Mick,

if you look back through the messages on this group, you will see my account of fixing this, using Harrys method. Simply, the fix is a resistor across the AGC transistor. Its a simple fix but quite tricky to carry out. Im not too sure why it works, but it does!

Martin G7MRV

--- In electrichandbag@yahoogroups.com, g3vvt@... wrote:
>
> Has anyone any experience with S Meter FSD at switch on and deaf Rx, seems
> to improve if left powered on for a while.
> Cheers
>
> Mick
> G1EUZ
>
>>
> Hi Mick,
>
> There was an article in PW August 2007 in Harry, G3LLL's column on the
> subject with a modification to clear the problem. Also I believe ageing
> electrolytics can play a part in the problem. Have also seen a similar problem
> where this is coupled with very low FM TX power at switch on that comes normal
> as the radio is used. Never got as far as checking on SSB for the same
> problem.
>
> Regards,
> Bob, G3VVT
>

137. Re: Loud Clicking noise

Yahoo group: electrichandbag
Date: 2009-08-13 15:18:16 UTC
From: kellyrichard16
Topic: 132 Message: 137

--- In electrichandbag@yahoogroups.com, "Martin" <barfield673@...>
wrote:
>
> Hi Richard, welcome to the group,
>
> That sounds to me like there is a DC level on the speaker from
somewhere. You could check for that with a meter. Be careful opeing the
radio up, the speaker lead is hardwired and not very long.
>
> Where that level is coming from though, i'll have to think about that!
could be a leaky electrolytic blocking cap, whats the audio like?
>
>
> Martin G7MRV
>
> --- In electrichandbag@yahoogroups.com, "kellyrichard16"
richard.gm0grd@ wrote:
> >
> >
> > Hi Everyone, I am new to the group and thank you for letting me
join.
> >
> > I have a slight problem with my ft-290r mk1 you might be able to
help me
> > with.
> >
> > When i key and unkey the mike their is a loud click from the
speaker,
> > even with the volume
> >
> > control turned fully anti-clockwise it is still prominent. Mode
> > positions or different power levels
> >
> > make no difference. Hope someone can offer an explanation. Thank You
in
> > advance.
> >
> > Richard (gm0grd)
> >
>
Hi Martin, Thank you for the quick reply to my problem. The recieve
audio is ok and the transmitted audio, monitored on a separate receiver
is very clear. I also noticed that the clicking noise is not heard on
the separate receiver when keying and unkeying the mic. Hope this might
help. 73 Richard (gmogrd)

138. Telescopic antenna

Yahoo group: electrichandbag
Date: 2009-08-13 15:38:00 UTC
From: m3snd
Topic: 138 Message: 138

Hi group i have just picked up a 290 mk1 but it is without its internal telescopic antenna. Can anyone suggest a place that sells the original item and how is it fitted back in?

Are there any other antennas that can fit into the same hole rubber duck type maybe or is there a mod to do this?

One of the mods posted on the net i have seen is the cap that can be cut out to increase the the highter audio frequencies of received audio;has anyone tried this mod and does it affect all audio received or just specific modes?

This is my second 290 but alas it is without a mutek front end that my first one had but i have to say its a great little rig and i am really enjoying using it.

139. Looking for a FT-290

Yahoo group: electrichandbag
Date: 2009-08-15 16:04:52 UTC
From: kf7bsf
Topic: 139 Message: 139

I've been tracking this site, ebay, and several other sites trying to locate an FT-290 for sell. Does anyone have any leads or suggestions as to where I might find one of these rigs for sale?

Gene/KF7BSF

140. Re: Looking for a FT-290

Yahoo group: electrichandbag
Date: 2009-08-15 18:51:09 UTC
From: Martin
Topic: 139 Message: 140

Theres several on offer now on ebay UK, the trick will be finding a seller who will ship outside the UK

Martin

--- In electrichandbag@...m, "kf7bsf" <kf7bsf@...> wrote:
>
> I've been tracking this site, ebay, and several other sites trying to locate an FT-290 for sell. Does anyone have any leads or suggestions as to where I might find one of these rigs for sale?
>
> Gene/KF7BSF
>

141. Re: Telescopic antenna

Yahoo group: electrichandbag
Date: 2009-08-16 13:12:02 UTC
From: paulallans
Topic: 138 Message: 141

Back in Dec 2002 I bought one directly from Yaesu in the USA . I called them at 714-827-7600 and ordered a Q3000020 over the phone.

--- In electrichandbag@yahoogroups.com, "m3snd" <m3snd@...> wrote:
>
> Hi group i have just picked up a 290 mk1 but it is without its internal telescopic antenna.
> Can anyone suggest a place that sells the original item and how is it fitted back in?
>
> Are there any other antennas that can fit into the same hole rubber duck type maybe or is there a mod to do this?
>
> One of the mods posted on the net i have seen is the cap that can be cut out to increase the the highter audio frequencies of received audio;has anyone tried this mod and does it affect all audio received or just specific modes?
>
> This is my second 290 but alas it is without a mutek front end that my first one had but i have to say its a great little rig and i am really enjoying using it.
>

142. Re: Loud Clicking noise

Yahoo group: electrichandbag
Date: 2009-08-16 14:23:33 UTC
From: Martin
Topic: 132 Message: 142

just thinking, and forgive me if this sounds a bit patronising, but are your sure its not the sound of the tx relay that you can hear? Its not exactly silent on mine!

It sounds like whatever it is isnt causing any operational problems though

Martin

--- In electrichandbag@yahoogroups.com, "kellyrichard16" <richard.gm0grd@...> wrote:
>
>
> --- In electrichandbag@yahoogroups.com, "Martin" <barfield673@>
> wrote:
>sounds to me like there is a DC level on the speaker --- whats the audio like?
> >
> >
> >> >
> > >
> > --- In electrichandbag@yahoogroups.com, "kellyrichard16"
> richard.gm0grd@ wrote:
> > >
> > > > > > >
> > >> >
> Hi Martin, Thank you for the quick reply to my problem. The recieve
> audio is ok and the transmitted audio, monitored on a separate receiver
> is very clear. I also noticed that the clicking noise is not heard on
> the separate receiver when keying and unkeying the mic. Hope this might
> help. 73 Richard (gmogrd)
>

143. Re: Loud Clicking noise

Yahoo group: electrichandbag
Date: 2009-08-20 19:06:42 UTC
From: kellyrichard16
Topic: 132 Message: 143

--- In electrichandbag@yahoogroups.com, "Martin" <barfield673@...> wrote:
>
> just thinking, and forgive me if this sounds a bit patronising, but are your sure its not the sound of the tx relay that you can hear? Its not exactly silent on mine!
>
> It sounds like whatever it is isnt causing any operational problems though
>
> Martin

Hi Martin, Sorry for the delay, Yes I was thinking along those lines myself. I find the clicking noise through the speaker annoying at times, especially at night when things are quiet around the house it seems noisier, but as you said the radio is working ok, i can't fault it, so i will probably get used to it after a while and hopefully not notice it any longer. Many thanks for your help meantime, it is much appreciated.
73 Martin, best wishes. Richard....

144. Re: Telescopic antenna

Yahoo group: electrichandbag
Date: 2009-09-08 09:17:34 UTC
From: m3snd
Topic: 138 Message: 144

--- In electrichandbag@yahoogroups.com, "paulallans" <paulallans@...> wrote:
>
> Back in Dec 2002 I bought one directly from Yaesu in the USA . I called them at 714-827-7600 and ordered a Q3000020 over the phone.
>
>
>
> --- In electrichandbag@yahoogroups.com, "m3snd" <m3snd@> wrote:
> >
> > Hi group i have just picked up a 290 mk1 but it is without its internal telescopic antenna.
> > Can anyone suggest a place that sells the original item and how is it fitted back in?
> >
> > Are there any other antennas that can fit into the same hole rubber duck type maybe or is there a mod to do this?
> >
> > One of the mods posted on the net i have seen is the cap that can be cut out to increase the the highter audio frequencies of received audio;has anyone tried this mod and does it affect all audio received or just specific modes?
> >
> > This is my second 290 but alas it is without a mutek front end that my first one had but i have to say its a great little rig and i am really enjoying using it.
> >
>
Thank you for the reply and info,i shall give them a try.

Regards Kev M3SND

145. AGC fault - Its back!

Yahoo group: electrichandbag
Date: 2009-09-08 10:46:56 UTC
From: zaktherabbit
Topic: 145 Message: 145

Well chaps, it seems the resistor fix for the AGC fault on the mk1, while a good simple fix, is only temporarily affective. The fault has now returned on my set.

So, when i have time, it looks like a lot of fault finding again. Perhaps now is the time to consider the global swapout of electrolytic caps!

What i would really like to do is take a dead mk1 and strip it down completely, to develop a componant position overlay to aid fault finding and repair. Unfortunatly this is my only 2m SSB radio. But if anyone else with more equipment has a dead mk1 they would be willing to donate, i'd be more than pleased to rip it to shreds for them in the name of research!

Regards

Martin G7MRV

146. Re: AGC fault - Its back!

Yahoo group: electrichandbag
Date: 2009-09-08 11:41:31 UTC
From: zaktherabbit
Topic: 145 Message: 146

Quick update.

The most likely cause of this fault, is leakage, either via the electrolytic caps of the detector diodes.

The caps are easily sourced, being as they are just small electrolytics. The diodes however are obsolete. A modern equivalent of these germanium diodes should be possible, but, i have managed to source actual 1S188FM diodes. I have ordered a batch of ten, so if they do prove to be the cause, I will have a small stock of these to sell to others needing the same repair

Martin G7MRV

147. Display lamp replacement

Yahoo group: electrichandbag
Date: 2009-09-08 19:22:53 UTC
From: billaycock2000
Topic: 147 Message: 147

I have an FT-690RII I want to sell or trade. Unfortunately, the front right display lamp is out. Otherwise it works fine. I prefer to offer it with the lamp working.
I would like to fix the lamp, but I need a little help.
I am not hesitant about undertaking the job, but I expect that it will go easier if I have some help. Is there anyone out there that has any tips to offer me to make the job easier or safer (for the rig)? In particular, the removal of the front to get access to the lamp is a concern.
Thanks -- Bill--W4BSG (Very new member)

148. Re: [electrichandbag] Display lamp replacement

Yahoo group: electrichandbag
Date: 2009-09-08 19:52:39 UTC
From: kf7bsf@genedeal.com
Topic: 147 Message: 148

I would be interested in buying this unit. What are you asking for it?

On Sep 8, 2009, at 01:22 PM, billaycock2000 wrote:

> I have an FT-690RII I want to sell or trade. Unfortunately, the
> front right display lamp is out. Otherwise it works fine. I prefer
> to offer it with the lamp working.
> I would like to fix the lamp, but I need a little help.
> I am not hesitant about undertaking the job, but I expect that it
> will go easier if I have some help. Is there anyone out there that
> has any tips to offer me to make the job easier or safer (for the
> rig)? In particular, the removal of the front to get access to the
> lamp is a concern.
> Thanks -- Bill--W4BSG (Very new member)
>
>
>

Gene Deal - KF7BSF
kf7bsf@...

149. Re: Display lamp replacement

Yahoo group: electrichandbag
Date: 2009-09-08 20:06:39 UTC
From: zaktherabbit
Topic: 147 Message: 149

There you go Bill, maybe you wont need to risk opening it up!

I only have experience with mk1's which are very tricky to dismantle. But i think the mkIIs on the whole are much simpler

Martin

--- In electrichandbag@yahoogroups.com, kf7bsf@... wrote:
>
> I would be interested in buying this unit. What are you asking for it?
>
> On Sep 8, 2009, at 01:22 PM, billaycock2000 wrote:
>
> > I have an FT-690RII I want to sell or trade. Unfortunately, the
> > front right display lamp is out. Otherwise it works fine. I prefer
> > to offer it with the lamp working.
> > I would like to fix the lamp, but I need a little help.
> > I am not hesitant about undertaking the job, but I expect that it
> > will go easier if I have some help. Is there anyone out there that
> > has any tips to offer me to make the job easier or safer (for the
> > rig)? In particular, the removal of the front to get access to the
> > lamp is a concern.
> > Thanks -- Bill--W4BSG (Very new member)
> >
> >
> >
>
> --
> Gene Deal - KF7BSF
> kf7bsf@...
>

150. Buying and Selling on the group

Yahoo group: electrichandbag
Date: 2009-09-08 20:15:23 UTC
From: zaktherabbit
Topic: 150 Message: 150

Hi all,

This is something i dont think we've had occur before, but can i ask that if you make a trade with anyone, that once you have decided to do so, please conduct actual negotiations over price etc off-list, as these details are not likely to be of interest to others.

I have no problem with anyone offering something to sell, or asking to buy something (so long as its FT-x90 related), indeed i will do so myself from time to time, but please keep on-list messages to things of interest to the majority.

Bill/Gene - I know ive posted this very soon after your messages, but please dont feel its directed specifically at you. Its just something ive not yet had need to consider. Your more than welcome to trade, and i hope things go well

If anyone has any comments or feelings about this, please let me know. But for now, i think the following rules make sense -

1. You can offer an item for sale so long as it is FT-x90 related
2. You can post a wanted for an FT-x90 or parts etc
3. You can respond to someone elses post
4. Actual discussions of price, shipping etc etc with a buyer/seller should be off-list

I hope this is acceptable chaps

Martin G7MRV

151. Re: Buying and Selling on the group

Yahoo group: electrichandbag
Date: 2009-09-08 20:22:30 UTC
From: kf7bsf
Topic: 150 Message: 151

Martin,

I totally agree with your plan. I think we all would agree that there's a point at which a conversation/exchange should be taken off-line (or off-group). Thank for the reminder.

Gene/KF7BSF

--- In electrichandbag@yahoogroups.com, "zaktherabbit" <barfield673@...> wrote:
>
> Hi all,
>
> This is something i dont think we've had occur before, but can i ask that if you make a trade with anyone, that once you have decided to do so, please conduct actual negotiations over price etc off-list, as these details are not likely to be of interest to others.
>
> I have no problem with anyone offering something to sell, or asking to buy something (so long as its FT-x90 related), indeed i will do so myself from time to time, but please keep on-list messages to things of interest to the majority.
>
> Bill/Gene - I know ive posted this very soon after your messages, but please dont feel its directed specifically at you. Its just something ive not yet had need to consider. Your more than welcome to trade, and i hope things go well
>
> If anyone has any comments or feelings about this, please let me know. But for now, i think the following rules make sense -
>
> 1. You can offer an item for sale so long as it is FT-x90 related
> 2. You can post a wanted for an FT-x90 or parts etc
> 3. You can respond to someone elses post
> 4. Actual discussions of price, shipping etc etc with a buyer/seller should be off-list
>
> I hope this is acceptable chaps
>
> Martin G7MRV
>

152. Re: Buying and Selling on the group

Yahoo group: electrichandbag
Date: 2009-09-08 20:29:51 UTC
From: zaktherabbit
Topic: 150 Message: 152

Thanks Gene,

didnt want to sound like i was cracking the whip! Its tricky sometimes managing a group, saying things in a way that gets across what you mean without it sounding bad

Martin

--- In electrichandbag@yahoogroups.com, "kf7bsf" <kf7bsf@...> wrote:
>
> Martin,
>
> I totally agree with your plan. I think we all would agree that there's a point at which a conversation/exchange should be taken off-line (or off-group). Thank for the reminder.
>
> Gene/KF7BSF
>

153. Re: AGC fault - Its back!

Yahoo group: electrichandbag
Date: 2009-09-09 11:20:18 UTC
From: zaktherabbit
Topic: 145 Message: 153

well, im sure you all realised that was mean to say caps OR diodes!

another point to make - it has been thought that flux residue or dirt/oxidation on the pcb can cause this fault, so before trying an electronic repair, it is probably a very good idea to clean the PCB with isopropanol

Martin G7MRV
(of course, after ordering the diodes my sets come good again!)

--- In electrichandbag@yahoogroups.com, "zaktherabbit" <barfield673@...> wrote:
>
> Quick update.
>
> The most likely cause of this fault, is leakage, either via the electrolytic caps of the detector diodes.
>
> The caps are easily sourced, being as they are just small electrolytics. The diodes however are obsolete. A modern equivalent of these germanium diodes should be possible, but, i have managed to source actual 1S188FM diodes. I have ordered a batch of ten, so if they do prove to be the cause, I will have a small stock of these to sell to others needing the same repair
>
> Martin G7MRV
>

154. Re: [electrichandbag] Re: Display lamp replacement

Yahoo group: electrichandbag
Date: 2009-09-09 17:09:20 UTC
From: Bill Aycock
Topic: 147 Message: 154

Martin
The post from Gene got to me after your general post, so I was a little confused. Strictly speaking, that was a call for help, not an offer, but, obviously, it had the same effect. I have replied to him, off list, because I do agree with your position.
Thanks--Bill--W4BSG

----- Original Message -----
From: "zaktherabbit" <barfield673@...>
To: <electrichandbag@yahoogroups.com>
Sent: Tuesday, September 08, 2009 3:06 PM
Subject: [electrichandbag] Re: Display lamp replacement

> There you go Bill, maybe you wont need to risk opening it up!
>
> I only have experience with mk1's which are very tricky to dismantle. But
> i think the mkIIs on the whole are much simpler
>
>
> Martin
>
>
>
> --- In electrichandbag@yahoogroups.com, kf7bsf@... wrote:
>>
>> I would be interested in buying this unit. What are you asking for it?
>>
>> On Sep 8, 2009, at 01:22 PM, billaycock2000 wrote:
>>
>> > I have an FT-690RII I want to sell or trade. Unfortunately, the
>> > front right display lamp is out. Otherwise it works fine. I prefer
>> > to offer it with the lamp working.
>> > I would like to fix the lamp, but I need a little help.
>> > I am not hesitant about undertaking the job, but I expect that it
>> > will go easier if I have some help. Is there anyone out there that
>> > has any tips to offer me to make the job easier or safer (for the
>> > rig)? In particular, the removal of the front to get access to the
>> > lamp is a concern.
>> > Thanks -- Bill--W4BSG (Very new member)
>> >
>> >
>> >
>>
>> ____
>> Gene Deal - KF7BSF

>> kf7bsf@...
>>
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> ------------------------------------
>
> Yahoo! Groups Links
>
>
>

155. Charging Nicads

Yahoo group: electrichandbag
Date: 2009-09-16 19:11:04 UTC
From: interadd@btinternet.com
Topic: 155 Message: 155

Hi Guys,
I have managed to get hold of 8 C cell 1700 ma batteries for my FT290 can anyone help me with a method of charging, 8 x 1.2 volts = 9.6 volts so i guess a mains adaptor with 9.6 volts output would do, but not sure about how many amps would be needed and how long to charge.

Also can you recommend a 10 watt amp for the ft 290, i can only go up to 10 watts output as this is limited by my licence.

Thanks in advance.

Tim

156. Re: [electrichandbag] Charging Nicads

Yahoo group: electrichandbag
Date: 2009-09-16 22:33:56 UTC
From: Geoff Blake
Topic: 155 Message: 156

On Wed, 16 Sep 2009, interadd@... wrote:

> Hi Guys, I have managed to get hold of 8 C cell 1700 ma batteries for my
> FT290 can anyone help me with a method of charging, 8 x 1.2 volts = 9.6
> volts so i guess a mains adaptor with 9.6 volts output would do, but not
> sure about how many amps would be needed and how long to charge.

Tim, there are many ways of charging NiCd's, but you do not charge them with a constant voltage.

The simplest way of doing it yourself is to build a constant current charger, something like a C/10 charger. The idea is to charge the cells in series at a current of 1/10th the battery capacity, i.e. 170mA. To fully charge the battery will take about 14hrs from fully discharged - this because the batteries are only about 70% efficient.

To make a constant current charger there are 100's of designs on the net, but generally you will need to provide around 12V or more to the battery. To provide the constant current part you could use a FET as a simple current limiter or use a 7805 type regulator.

For faster charging, you will have to use a charge sensing type regulator, again plenty of designs on the net. This is what I use, but I came across a commercial unit which works equally well charging NiCd's and NimH cells. It is a Swedich Mascot design and it was cheap enough to make it not worth while buying a unit.

> Also can you recommend a 10 watt amp for the ft 290, i can only go up to
> 10 watts output as this is limited by my licence.

Look around for a Microwave Modules or Microset 30W amplifier, and keep the power down. Remember you will want a 1 or 3W input version not the 10W type.

Good luck

Geoff

--
Geoff Blake G8GNZ located near Chelmsford, Essex, U.K.
Please reply to: geoff(at)palaemon(dot)demon(dot)co(dot)uk
Using Linux on Intel & Linux or NetBSD on Sun Sparc platforms

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---

157. Re: [electrichandbag] Charging Nicads

Yahoo group: electrichandbag
Date: 2009-09-17 06:58:16 UTC
From: Geoff Blake
Topic: 155 Message: 157

On Wed, 16 Sep 2009, Geoff Blake wrote:

> On Wed, 16 Sep 2009, interadd@... wrote:
>
> > Hi Guys, I have managed to get hold of 8 C cell 1700 ma batteries for my
> > FT290 can anyone help me with a method of charging, 8 x 1.2 volts = 9.6
> > volts so i guess a mains adaptor with 9.6 volts output would do, but not
> > sure about how many amps would be needed and how long to charge.
>
> Tim, there are many ways of charging NiCd's, but you do not charge them
> with a constant voltage.
>
> The simplest way of doing it yourself is to build a constant current
> charger, something like a C/10 charger. The idea is to charge the cells in
> series at a current of 1/10th the battery capacity, i.e. 170mA. To fully
> charge the battery will take about 14hrs from fully discharged - this
> because the batteries are only about 70% efficient.

Following up on my own post, I forgot to mention why the C/10 rate is
used. If you rapidly charge NiCd cells, when the cell is fully charged
the energy from continued charging is dissipated as heat. At C/10 a
moderate amount of overcharging will be tolerated, at (say) C/50
continuous overcharging can be tolerated, at C/0.7 (recharges the cell in
about 1 hour) charging has to be closely controlled otherwise the cell may
be seriously damaged or even explode.

Also, I missed stating that the "C" in C/10 etc is the capacity of the
cell, in your case, 1700mA/Hr. Therefore a C/10 charge rate will be 170mA.

Geoff

--
Geoff Blake G8GNZ located near Chelmsford, Essex, U.K.
Please reply to: geoff(at)palaemon(dot)demon(dot)co(dot)uk
Using Linux on Intel & Linux or NetBSD on Sun Sparc platforms

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---

158. Re: Display lamp replacement

Yahoo group: electrichandbag
Date: 2009-09-17 10:06:59 UTC
From: zaktherabbit
Topic: 147 Message: 158

Hi Bill,

yes, i understood. Sorry for any confusion caused. It was just my intention to address the possibility of buying /selling, something i hadnt appreciated before. With hindsight, i should have delayed the message so as not to have jumped straight in. I certainly dont mind such posts

Regards

Martin

--- In electrichandbag@yahoogroups.com, "Bill Aycock" <baycock2@...> wrote:
>
> Martin
> The post from Gene got to me after your general post, so I was a little
> confused. Strictly speaking, that was a call for help, not an offer, but,
> obviously, it had the same effect. I have replied to him, off list, because
> I do agree with your position.
> Thanks--Bill--W4BSG
>
>

159. Re: AGC fault - Its back!

Yahoo group: electrichandbag
Date: 2009-09-22 10:06:26 UTC
From: ZL1SWW
Topic: 145 Message: 159

Hi all,

Simon from ZL here, it's nice to see some info / activity here re FT290.
I have also go tthe dreaded AGC fault and did change the 3 electros I see in the equation. The ones I picked on were C86, C87 and C92. Changed 86 & 87 first with no apprent change but C92 improved my switchon time from 20 mins to 2mins after 3 days of no power to the unit.

Interested to see if the diodes make any difference. 1S88FM - hmm, they look like germanium diodes but have not seen any data on them. Probably need the low voltage drop..
Anyone tried lifting the emmitter of Q1017? I haven't - too hard to get at.. Lifting of the collector of Q1014 would be interesting as well.

My radio was pretty sick but now sounding pretty good otherwise. U/LSB was off so unit had total realignment. Found all oscillators off frequency. I'm getting about -118dBm for 12 dB sinad so not too bad.
Mic Audio still seems a bit thin.

Next mod will be to put a small monostable in so when I key CW line, it will pull down PTT as well for the duration of the CW work and then release after about 3/4 sec or so.
This rig will be used as a transverter driver.

Hope to hear some updates sometime.

Cheers,

Simon
ZL1SWW
www.qsl.net/zl1sww

--- In electrichandbag@yahoogroups.com, "zaktherabbit" <barfield673@...> wrote:
>
> well, im sure you all realised that was mean to say caps OR diodes!
>
> another point to make - it has been thought that flux residue or dirt/oxidation on the pcb can cause this fault, so before trying an electronic repair, it is probably a very good idea to clean the PCB with isopropanol
>
> Martin G7MRV
> (of course, after ordering the diodes my sets come good again!)
>
>
> --- In electrichandbag@yahoogroups.com, "zaktherabbit" <barfield673@> wrote:
> >
> > Quick update.
> >
> > The most likely cause of this fault, is leakage, either via the electrolytic caps of

the detector diodes.
> >
> > The caps are easily sourced, being as they are just small electrolytics. The diodes however are obsolete. A modern equivalent of these germanium diodes should be possible, but, i have managed to source actual 1S188FM diodes. I have ordered a batch of ten, so if they do prove to be the cause, I will have a small stock of these to sell to others needing the same repair
> >
> > Martin G7MRV
> >
>

160. modern data modes with 290s

Yahoo group: electrichandbag
Date: 2009-10-13 21:16:04 UTC
From: zaktherabbit
Topic: 160 Message: 160

Hi

Has anyone had any success with, or indeed even attempted, using modern weak signal datamodes such as JT65 or WSPR with an FT-290?

Martin G7MRV

161. FT790R (Mk1)

Yahoo group: electrichandbag
Date: 2009-10-15 18:20:21 UTC
From: zl1ujg
Topic: 161 Message: 161

Hi,
My name is Kevin ZL1UJG, a new subscriber to the group.
Just acquired a FT790R (Mk1) in almost mint condition. Only fault was it didnt work on battery. Although someone had reworked the DC connectors, it was oxidisation on the battery terminals. Also there were two (intermittent) tags on the battery holder which were behind rivets. A light scrape and some DeoxIT and its now working well on battery. I even got two sets of Batteries with it.
Useful for transverter use on the higher bands, which is one of the reasons I got it.
The review by the late G3OSS gave it a good report.(The review was in the Buyers Guide to Amateur Radio {Published in 1986})

Kevin

162. Re: [electrichandbag] FT790R (Mk1)

Yahoo group: electrichandbag
Date: 2009-10-16 20:29:58 UTC
From: Steve Sheriff
Topic: 161 Message: 162

Hi Kevin,
Welcome to the world of the FT-290 supporters group!!
You wont be disappointed with your purchase especially if you keep on top of the maintenance. Feel free to ask anything and use the resources and share anything you find out. I dare say there is more knowlege on the 290 than 790 but don't let that stop you joining in!

Steve
G7TAO

On 15 Oct 2009, at 19:20, zl1ujg wrote:

> Hi,
> My name is Kevin ZL1UJG, a new subscriber to the group.
> Just acquired a FT790R (Mk1) in almost mint condition. Only fault was it didnt work on battery. Although someone had reworked the DC connectors, it was oxidisation on the battery terminals. Also there were two (intermittent) tags on the battery holder which were behind rivets. A light scrape and some DeoxIT and its now working well on battery. I even got two sets of Batteries with it.
> Useful for transverter use on the higher bands, which is one of the reasons I got it.
> The review by the late G3OSS gave it a good report.(The review was in the Buyers Guide to Amateur Radio {Published in 1986})
>
> Kevin
>
>
>

163. Re: FT790R (Mk1)

Yahoo group: electrichandbag
Date: 2009-10-17 00:13:53 UTC
From: zl1ujg
Topic: 161 Message: 163

Hi,
Did I mention I have a Ft290 Mk1 and two Mk2's...
And a raft of other elderly equipment.

What I picked up in the review was that the FT790 Mk1 has a speech processor integral with the unit. (Just a VOGAD one I suspect), but it would add a dB or 2 to weak signal work.
Has anyone experimented with speech processing with the FT290 series

I must admit I would rather spend dollars on a more basic piece of equipment than something with menu's. That's just me...

Kevin
ZL1UJG

164. Source of microphone plugs?

Yahoo group: electrichandbag
Date: 2009-10-17 18:10:36 UTC
From: zaktherabbit
Topic: 164 Message: 164

Hi chaps

does anyone know of a source of microphone plugs to fit the 290?

I intend running datamodes with mine and need access to the mic and ptt lines. The obvious way to do this is via the mic socket if i can get hold of suitable plugs

Martin G7MRV

165. Re: Source of microphone plugs?

Yahoo group: electrichandbag
Date: 2009-10-17 18:44:10 UTC
From: zl1ujg
Topic: 164 Message: 165

Try
http://www.thunderpole.co.uk/plugs+connectors-mic-plugs.htm

Kevin
ZL1UJG

166. Wanted for restoration project

Yahoo group: electrichandbag
Date: 2009-10-19 18:00:56 UTC
From: rpcrichton
Topic: 166 Message: 166

Hi Group I have a Mk1 290 ,Mk2 290 a FT690 Standard C58 2m C78 70cm several TR 2300's TR 2200 TR 2200 GX

I am in need of a MK2 Carry case and strap and other accessories please if anybody has any bits and pieces in the back of a draw to spare can you think of me? also looking for a 790 all reasonable expenses met

kindest regards & best 73 Paul M1BPT JO02FV Norfolk UK

167. Re: Charging Nicads

Yahoo group: electrichandbag
Date: 2009-10-19 18:12:54 UTC
From: rpcrichton
Topic: 155 Message: 167

Tim I don't know if the Yaesu amp is 10w but the VB2200 or VB2300 are 1 watt in 10 watts out powered from a 13.8 supply
Good luck with your search Paul M1BPT

--- In electrichandbag@yahoogroups.com, "interadd@..." <interadd@...> wrote:
>
> Hi Guys,
> I have managed to get hold of 8 C cell 1700 ma batteries for my FT290 can anyone help me with a method of charging, 8 x 1.2 volts = 9.6 volts so i guess a mains adaptor with 9.6 volts output would do, but not sure about how many amps would be needed and how long to charge.
>
> Also can you recommend a 10 watt amp for the ft 290, i can only go up to 10 watts output as this is limited by my licence.
>
> Thanks in advance.
>
> Tim
>

168. Re: Buying and Selling on the group

Yahoo group: electrichandbag
Date: 2009-10-19 18:07:58 UTC
From: rpcrichton
Topic: 150 Message: 168

Very Sensible Martin , Hope my question is allowed? Best 73 Paul

--- In electrichandbag@yahoogroups.com, "zaktherabbit" <barfield673@...> wrote:
>
> Hi all,
>
> This is something i dont think we've had occur before, but can i ask that if you make a trade with anyone, that once you have decided to do so, please conduct actual negotiations over price etc off-list, as these details are not likely to be of interest to others.
>
> I have no problem with anyone offering something to sell, or asking to buy something (so long as its FT-x90 related), indeed i will do so myself from time to time, but please keep on-list messages to things of interest to the majority.
>
> Bill/Gene - I know ive posted this very soon after your messages, but please dont feel its directed specifically at you. Its just something ive not yet had need to consider. Your more than welcome to trade, and i hope things go well
>
> If anyone has any comments or feelings about this, please let me know. But for now, i think the following rules make sense -
>
> 1. You can offer an item for sale so long as it is FT-x90 related
> 2. You can post a wanted for an FT-x90 or parts etc
> 3. You can respond to someone elses post
> 4. Actual discussions of price, shipping etc etc with a buyer/seller should be off-list
>
> I hope this is acceptable chaps
>
> Martin G7MRV
>

169. Re: Buying and Selling on the group

Yahoo group: electrichandbag
Date: 2009-10-19 20:30:14 UTC
From: zaktherabbit
Topic: 150 Message: 169

Hi Paul,

no problems with your question, thats fine

Martin G7MRV

--- In electrichandbag@yahoogroups.com, "rpcrichton" <m1bpt@...> wrote:
>
> Very Sensible Martin , Hope my question is allowed? Best 73 Paul
>
> --- In electrichandbag@yahoogroups.com, "zaktherabbit" <barfield673@> wrote:
> >
> > Hi all,
> >
> > This is something i dont think we've had occur before, but can i ask that if you make a trade with anyone, that once you have decided to do so, please conduct actual negotiations over price etc off-list, as these details are not likely to be of interest to others.
> >
> > I have no problem with anyone offering something to sell, or asking to buy something (so long as its FT-x90 related), indeed i will do so myself from time to time, but please keep on-list messages to things of interest to the majority.
> >
> > Bill/Gene - I know ive posted this very soon after your messages, but please dont feel its directed specifically at you. Its just something ive not yet had need to consider. Your more than welcome to trade, and i hope things go well
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> > If anyone has any comments or feelings about this, please let me know. But for now, i think the following rules make sense -
> >
> > 1. You can offer an item for sale so long as it is FT-x90 related
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> > 4. Actual discussions of price, shipping etc etc with a buyer/seller should be off-list
> >
> > I hope this is acceptable chaps
> >
> > Martin G7MRV
> >
>

170. Rule change - please read

Yahoo group: electrichandbag
Date: 2009-10-31 17:05:24 UTC
From: zaktherabbit
Topic: 170 Message: 170

Hi All,

As a result of recent posts, i have revised the original group rules regarding the posting of for sale and wanted posts. My original rules, upon re-reading, were a little too strict!

The new rule is as below -

IMPRORTANT NOTE - SELLING. (This is a change to the previous rules)
If you have an elctrichandbag, or its ancilliaries to sell, or you need to find a particular item, you may post a For Sale or a Wanted message. However, any actual discussions with buyers or sellers should then be carried out 'off-list'. Please dont post such things to the whole group. If you have lots of things to sell, or they are not directly relevant to these radios, use ebay or the like. Surplus to give away or 'swapsies' are ok.
If you are replying to a For Sale or Wanted, please do so directly to the original poster, not the whole group.

I hope this clears up any ambiguity (is that how you spell it?) regarding selling on the group

cheers

Martin G7MRV

171. Re: Source of microphone plugs?

Yahoo group: electrichandbag
Date: 2009-10-31 17:14:47 UTC
From: zaktherabbit
Topic: 164 Message: 171

Hi Kevin,

I had a look there, but wasnt confident that the 7 way plug listed had the correct 'geometry'

I have however found a source of the correct type. Rocket Radio in Letchworth stock them, and advertise them as suitable for FT-290s.
They have an ebay shop, which is how i ordered one. £2.55 with free posting.

I just need to build the WSJT interface unit now and see if it works on WSPR!

Martin G7MRV

--- In electrichandbag@yahoogroups.com, "zl1ujg" <zl1ujg@...> wrote:
>
> Try
> http://www.thunderpole.co.uk/plugs+connectors-mic-plugs.htm
>
> Kevin
> ZL1UJG
>

172. Great Northern Hamfest - Barnsley Metrodome 1st Nov

Yahoo group: electrichandbag
Date: 2009-10-31 17:19:59 UTC
From: zaktherabbit
Topic: 172 Message: 172

Hi All,

I will be attending the rally in Barnsley tomorrow. If anyone else from the group is there, feel free to say hello. I'll have my callsign badge on, recently liberated from the RSGB convention! ALso attending should be Steve G7TAO, our moderator

Martin G7MRV

173. FT 290 SSB frequency error

Yahoo group: electrichandbag
Date: 2009-10-31 20:23:19 UTC
From: tedspires
Topic: 173 Message: 173

I have just switched on a FT 290 Mk 1 after about 15 years of storage and was delighted to find that it seemed to work fine. However, on SSB it seems to be about 2.5kHz off on Tx frequency. I picked up, on another site, that a frequent problem is that the PLL can move off frequency over time and the remedy is to retune the PLL circuit. I have been unable to locate which component needs to be retuned and wondered if anyone out there has come across this before and can advise how to go about resolving the problem. Any thoughts would be appreciated,

Ted
G7VHC

174. Re: [electrichandbag] FT 290 SSB frequency error

Yahoo group: electrichandbag
Date: 2009-11-01 10:31:44 UTC
From: Geoff Blake
Topic: 173 Message: 174

On Sat, 31 Oct 2009, tedspires wrote:

> I have just switched on a FT 290 Mk 1 after about 15 years of storage
> and was delighted to find that it seemed to work fine. However, on SSB
> it seems to be about 2.5kHz off on Tx frequency. I picked up, on another
> site, that a frequent problem is that the PLL can move off frequency
> over time and the remedy is to retune the PLL circuit. I have been
> unable to locate which component needs to be retuned and wondered if
> anyone out there has come across this before and can advise how to go
> about resolving the problem. Any thoughts would be appreciated,

Hello Ted,

I would doubt that it will be the PLL, if the PLL moves off frequency, the PLL control circuitry will correct the error until the offset exceeds the range of correction. When this happens the PLL will loose lock and the radio will cease to work.

I don't know specifically about the FT290 but most radio's flash the readout when PLL lock is lost.

It is more likely the one of the crystal oscillators off frequency, and most likely it is the one that "transverts" from IF to 2m. There will almost certainly be a trimming capacitor (or inductor) for this crystal.

The alignment instructions will tell you how to adjust the crystal frequency, but if not, switch to CW mode and tune to the frequency of a local beacon or repeater - use one that has a reputation for being on frequency. Then adjust the trimmer for a CW note of around 700Hz.

Alternatively, obtain the co-operation of somebody who has a SSB tranceiver which is KNOWN to be on frequency (many are not!) and adjust the trimmer to that that gives good sounding SSB when tuned to the right frequency.

I am sorry I cannot be more definite, but all my FT X90's are MKII's.

73 Geoff

--
Geoff Blake G8GNZ located near Chelmsford, Essex, U.K.
Please reply to: geoff(at)palaemon(dot)demon(dot)co(dot)uk
Using Linux on Intel & Linux or NetBSD on Sun Sparc platforms

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of the sender.

---

175. Re: FT 290 SSB frequency error

Yahoo group: electrichandbag
Date: 2009-11-01 10:01:23 UTC
From: ZL1SWW
Topic: 173 Message: 175

Hello Ted,

Simon from NZ here. I have a '290 Mk1 and mine was off frequency as well. I dug up a manula off the net that had the alignment details for the radio. It's part of the owners manual.

One thing I would check first is to see if FM is bang on frequency. If it is, and it sounds like maybe it is as you noted the problem on SSB only?
If SSB is bad and FM OK, I would suspect the carrier oscillators. Mine was off on USB more than LSB and made the aduio sound very thin as it would have partly been cut off by the SSB filter skirt.

If FM is bad then the PLL would need a tweak to get it right first before doing the LSB modes.

The adjustment in the manual is called SSB Carrier point adjustment. I dididn't like the procedure they used and rather just measure the carrier oscillators directly. I found tha there is enough signal to drive my HP 8920 and hopefully a sensitive counter as well if one does not have a test set. A scope probe on the case of the xtals X01 & X02 for the corresponding SSB mode L or U.

For LSB set for 10.8115MHz and USB, set for 10.8085, may as well set the CW mode as well while you are there at 10.8093MHz.

I just found the manula's way of setting was a bit arbitrary. Having done it my way, it now sounds great.

The manual is available from Mods.dk from memory.

Now just to get the AGC slow starting problem and it will be nailed!! It still works OK but have to leave it on for about 5 mins just like a valve radio to warm up. That's a really common fault and very hard to fix due to being able to access the parts in question on the board.

Hope this is of some help.

Cheers,

Simon
ZL1SWW

--- In electrichandbag@yahoogroups.com, "tedspires" <tedspires@...> wrote:
>
> I have just switched on a FT 290 Mk 1 after about 15 years of storage and was delighted to find that it seemed to work fine. However, on SSB it seems to be about 2.5kHz off on Tx frequency. I picked up, on another site, that a frequent problem is that the PLL can move off frequency over time and the remedy is to retune the PLL circuit. I have been unable to locate which component needs to be retuned and wondered if anyone out there has come across this before and can advise how to go about resolving the problem. Any thoughts would be

appreciated,
>
> Ted
> G7VHC
>

176. Re: FT 290 SSB frequency error

Yahoo group: electrichandbag
Date: 2009-11-01 20:50:06 UTC
From: zaktherabbit
Topic: 173 Message: 176

Simon,

what input port on your test set did you use? I have a Marconi 2955B, and also need to align the carrier point oscillator, im not sure there will be enough drive available

Ive not used by mk1 for a week, and the AGC fault has returned. I may now bite the bulet and swap out the germanium diodes in the AGC amp. Ive a few alignment jobs to do while i have the test set fired up anyway

Martin G7MRV

--- In electrichandbag@yahoogroups.com, "ZL1SWW" <hanzinzl@...> wrote:
>
> Hello Ted,
>
> Simon from NZ here. I have a '290 Mk1 and mine was off frequency as well. I dug up a manula off the net that had the alignment details for the radio. It's part of the owners manual.
>
> One thing I would check first is to see if FM is bang on frequency. If it is, and it sounds like maybe it is as you noted the problem on SSB only?
> If SSB is bad and FM OK, I would suspect the carrier oscillators. Mine was off on USB more than LSB and made the aduio sound very thin as it would have partly been cut off by the SSB filter skirt.
>
> If FM is bad then the PLL would need a tweak to get it right first before doing the LSB modes.
>
> The adjustment in the manual is called SSB Carrier point adjustment. I dididn't like the procedure they used and rather just measure the carrier oscillators directly. I found tha there is enough signal to drive my HP 8920 and hopefully a sensitive counter as well if one does not have a test set. A scope probe on the case of the xtals X01 & X02 for the corresponding SSB mode L or U.
>
> For LSB set for 10.8115MHz and USB, set for 10.8085, may as well set the CW mode as well while you are there at 10.8093MHz.
>
> I just found the manula's way of setting was a bit arbitrary. Having done it my way, it now sounds great.
>
> The manual is available from Mods.dk from memory.
>
> Now just to get the AGC slow starting problem and it will be nailed!! It still works OK but have to leave it on for about 5 mins just like a valve radio to warm up. That's a really common fault and very hard to fix due to being able to access the parts in question on the board.

>
> Hope this is of some help.
>
> Cheers,
>
> Simon
> ZL1SWW
>
>
>
>
> --- In electrichandbag@yahoogroups.com, "tedspires" <tedspires@> wrote:
> >
> > I have just switched on a FT 290 Mk 1 after about 15 years of storage and was delighted to find that it seemed to work fine. However, on SSB it seems to be about 2.5kHz off on Tx frequency. I picked up, on another site, that a frequent problem is that the PLL can move off frequency over time and the remedy is to retune the PLL circuit. I have been unable to locate which component needs to be retuned and wondered if anyone out there has come across this before and can advise how to go about resolving the problem. Any thoughts would be appreciated,
> >
> > Ted
> > G7VHC
> >
>

177. Re: FT 290 SSB frequency error

Yahoo group: electrichandbag
Date: 2009-11-01 20:56:47 UTC
From: zaktherabbit
Topic: 173 Message: 177

Ted,

Geoff is correct that the PLL is unlikely in itself to be at fault, however the reference oscillator for the PLL may well be out, this will be the case if FM as well as SSB is off frequency. Be sure to check this once the radio has had time to warm up, and check it is stable on a longish over! Tx can be off by several hundred Hz on FM with no noticable effect, but even a few 10s of Hz is obvious on SSB.

As Simon said, check the PLL reference is on-frequency using FM first, before moving onto the SSB CIO's. Its also worth, while you have the rig open, checking such things as FM deviation etc, and giving the rx front end a quick once-over as well

Martin G7MRV

--- In electrichandbag@yahoogroups.com, Geoff Blake <geoff@...> wrote:
>
> On Sat, 31 Oct 2009, tedspires wrote:
>
> > I have just switched on a FT 290 Mk 1 after about 15 years of storage
> > and was delighted to find that it seemed to work fine. However, on SSB
> > it seems to be about 2.5kHz off on Tx frequency. I picked up, on another
> > site, that a frequent problem is that the PLL can move off frequency
> > over time and the remedy is to retune the PLL circuit. I have been
> > unable to locate which component needs to be retuned and wondered if
> > anyone out there has come across this before and can advise how to go
> > about resolving the problem. Any thoughts would be appreciated,
>
> Hello Ted,
>
> I would doubt that it will be the PLL, if the PLL moves off frequency, the
> PLL control circuitry will correct the error until the offset exceeds the
> range of correction. When this happens the PLL will loose lock and the
> radio will cease to work.
>
> I don't know specifically about the FT290 but most radio's flash the
> readout when PLL lock is lost.
>
> It is more likely the one of the crystal oscillators off frequency, and
> most likely it is the one that "transverts" from IF to 2m. There will
> almost certainly be a trimming capacitor (or inductor) for this crystal.
>
> The alignment instructions will tell you how to adjust the crystal
> frequency, but if not, switch to CW mode and tune to the frequency of a
> local beacon or repeater - use one that has a reputation for being on
> frequency. Then adjust the trimmer for a CW note of around 700Hz.
>

> Alternatively, obtain the co-operation of somebody who has a SSB
> tranceiver which is KNOWN to be on frequency (many are not!) and adjust
> the trimmer to that that gives good sounding SSB when tuned to the right
> frequency.
>
> I am sorry I cannot be more definite, but all my FT X90's are MKII's.
>
> 73 Geoff
>
> --
> Geoff Blake G8GNZ located near Chelmsford, Essex, U.K.
> Please reply to: geoff(at)palaemon(dot)demon(dot)co(dot)uk
> Using Linux on Intel & Linux or NetBSD on Sun Sparc platforms
>
> Please avoid sending me Word or PowerPoint attachments.
> See <http://www.gnu.org/philosophy/no-word-attachments.html>
> ---
>
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> of the sender.
>
> ---
>

178. Re: FT 290 SSB frequency error

Yahoo group: electrichandbag
Date: 2009-11-02 07:55:54 UTC
From: ZL1SWW
Topic: 173 Message: 178

Hi Martin,

On the 8920 it has two inputs, one which is high power and has a beefy attenuator inside depending on the power level option you have, the other port labelled "Ant In' is sensitive and can only take a max i/p power of 200mW. I used a 100MHz scope probe and jsut touched it on the crystal case, the unit is sensitive enough to pickk this up and can measure with the counter option in it.
Don't know about the 2955, but on the HP, you can set it to manual, key in the wanted frequency and then look at the input frequency error and go for zero. In some cases this is the best way to go on real weak stuff as it will lock on better. most of my equipment is locked to a GPS refernce at 10MHz so it's pretty accurate.

Good luck on the AGC, Let us know if you have any breakthroughs! Mine is better since I changed the caps and having been off for a month, it will now power up in about 4 minutes.

Cheers,

Simon
ZL1SWW.

--- In electrichandbag@yahoogroups.com, "zaktherabbit" <barfield673@...> wrote:
>
> Simon,
>
> what input port on your test set did you use? I have a Marconi 2955B, and also need to align the carrier point oscillator, im not sure there will be enough drive available
>
> Ive not used by mk1 for a week, and the AGC fault has returned. I may now bite the bulet and swap out the germanium diodes in the AGC amp. Ive a few alignment jobs to do while i have the test set fired up anyway
>
>
> Martin G7MRV
>
>
> --- In electrichandbag@yahoogroups.com, "ZL1SWW" <hanzinzl@> wrote:
> >
> > Hello Ted,
> >
> > Simon from NZ here. I have a '290 Mk1 and mine was off frequency as well. I dug up a manula off the net that had the alignment details for the radio. It's part of the owners manual.
> >
> > One thing I would check first is to see if FM is bang on frequency. If it is, and it sounds like maybe it is as you noted the problem on SSB only?
> > If SSB is bad and FM OK, I would suspect the carrier oscillators. Mine was off on USB

more than LSB and made the aduio sound very thin as it would have partly been cut off by the SSB filter skirt.
> >
> > If FM is bad then the PLL would need a tweak to get it right first before doing the LSB modes.
> >
> > The adjustment in the manual is called SSB Carrier point adjustment. I dididn't like the procedure they used and rather just measure the carrier oscillators directly. I found tha there is enough signal to drive my HP 8920 and hopefully a sensitive counter as well if one does not have a test set. A scope probe on the case of the xtals X01 & X02 for the corresponding SSB mode L or U.
> >
> > For LSB set for 10.8115MHz and USB, set for 10.8085, may as well set the CW mode as well while you are there at 10.8093MHz.
> >
> > I just found the manula's way of setting was a bit arbitrary. Having done it my way, it now sounds great.
> >
> > The manual is available from Mods.dk from memory.
> >
> > Now just to get the AGC slow starting problem and it will be nailed!! It still works OK but have to leave it on for about 5 mins just like a valve radio to warm up. That's a really common fault and very hard to fix due to being able to access the parts in question on the board.
> >
> > Hope this is of some help.
> >
> > Cheers,
> >
> > Simon
> > ZL1SWW
> >
> >
> >
> >
> > --- In electrichandbag@yahoogroups.com, "tedspires" <tedspires@> wrote:
> > >
> > > I have just switched on a FT 290 Mk 1 after about 15 years of storage and was delighted to find that it seemed to work fine. However, on SSB it seems to be about 2.5kHz off on Tx frequency. I picked up, on another site, that a frequent problem is that the PLL can move off frequency over time and the remedy is to retune the PLL circuit. I have been unable to locate which component needs to be retuned and wondered if anyone out there has come across this before and can advise how to go about resolving the problem. Any thoughts would be appreciated,
> > >
> > > Ted
> > > G7VHC
> > >
> >
>

179. Re: FT 290 SSB frequency error

Yahoo group: electrichandbag
Date: 2009-11-02 11:07:52 UTC
From: zaktherabbit
Topic: 173 Message: 179

I had a look online at the spec of the HP8920, its quite a bit more capable than the Marconi 2955. The Marconi doesnt have a spectrum analyser or sweep generator, doesnt work on plain SSB, and unless you have the right option (i dont!) it has no inbuilt high sensitivity receiver. That said, i got it surplus along with a Bird 43 and some other bits for £50! cant really complain! Its lowest input is a 1W port, i will try it on that. Just as for your HP, setting the frequency and using the offset indication is best for weak inputs. If all fails, im sure i can add another BNC somewhere direct to the counter input.

Im thinking of a three pronged attack on the AGC - swap the diodes, swap the elctrolytics, clean the PCB with isopropanol or electrowash. If it clears the fault, it will give a choice of three cures!

Martin G7MRV

--- In electrichandbag@yahoogroups.com, "ZL1SWW" <hanzinzl@...> wrote:
>
> Hi Martin,
>
> On the 8920 it has two inputs, one which is high power and has a beefy attenuator inside depending on the power level option you have, the other port labelled "Ant In' is sensitive and can only take a max i/p power of 200mW. I used a 100MHz scope probe and jsut touched it on the crystal case, the unit is sensitive enough to pickk this up and can measure with the counter option in it.
> Don't know about the 2955, but on the HP, you can set it to manual, key in the wanted frequency and then look at the input frequency error and go for zero. In some cases this is the best way to go on real weak stuff as it will lock on better. most of my equipment is locked to a GPS refernce at 10MHz so it's pretty accurate.
>
> Good luck on the AGC, Let us know if you have any breakthroughs! Mine is better since I changed the caps and having been off for a month, it will now power up in about 4 minutes.
>
> Cheers,
>
> Simon
> ZL1SWW.
>
>
> --- In electrichandbag@yahoogroups.com, "zaktherabbit" <barfield673@> wrote:
> >
> > Simon,
> >
> > what input port on your test set did you use? I have a Marconi 2955B, and also need to align the carrier point oscillator, im not sure there will be enough drive available
> >
> > Ive not used by mk1 for a week, and the AGC fault has returned. I may now bite the bulet and swap out the germanium diodes in the AGC amp. Ive a few alignment jobs to do

while i have the test set fired up anyway
> >
> >
> > Martin G7MRV
> >
> >
> > --- In electrichandbag@yahoogroups.com, "ZL1SWW" <hanzinzl@> wrote:
> > >
> > > Hello Ted,
> > >
> > > Simon from NZ here. I have a '290 Mk1 and mine was off frequency as well. I dug up a manula off the net that had the alignment details for the radio. It's part of the owners manual.
> > >
> > > One thing I would check first is to see if FM is bang on frequency. If it is, and it sounds like maybe it is as you noted the problem on SSB only?
> > > If SSB is bad and FM OK, I would suspect the carrier oscillators. Mine was off on USB more than LSB and made the aduio sound very thin as it would have partly been cut off by the SSB filter skirt.
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> > > If FM is bad then the PLL would need a tweak to get it right first before doing the LSB modes.
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> > > The adjustment in the manual is called SSB Carrier point adjustment. I dididn't like the procedure they used and rather just measure the carrier oscillators directly. I found tha there is enough signal to drive my HP 8920 and hopefully a sensitive counter as well if one does not have a test set. A scope probe on the case of the xtals X01 & X02 for the corresponding SSB mode L or U.
> > >
> > > For LSB set for 10.8115MHz and USB, set for 10.8085, may as well set the CW mode as well while you are there at 10.8093MHz.
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> > > I just found the manula's way of setting was a bit arbitrary. Having done it my way, it now sounds great.
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> > > Now just to get the AGC slow starting problem and it will be nailed!! It still works OK but have to leave it on for about 5 mins just like a valve radio to warm up. That's a really common fault and very hard to fix due to being able to access the parts in question on the board.
> > >
> > > Hope this is of some help.
> > >
> > > Cheers,
> > >
> > > Simon
> > > ZL1SWW
> > >
> > >
> > >

> > >
> > > --- In electrichandbag@yahoogroups.com, "tedspires" <tedspires@> wrote:
> > > >
> > > > I have just switched on a FT 290 Mk 1 after about 15 years of storage and was delighted to find that it seemed to work fine. However, on SSB it seems to be about 2.5kHz off on Tx frequency. I picked up, on another site, that a frequent problem is that the PLL can move off frequency over time and the remedy is to retune the PLL circuit. I have been unable to locate which component needs to be retuned and wondered if anyone out there has come across this before and can advise how to go about resolving the problem. Any thoughts would be appreciated,
> > > >
> > > > Ted
> > > > G7VHC
> > > >
> > >
> >
>

180. AGC repairs - the saga continues...

Yahoo group: electrichandbag
Date: 2009-11-02 13:06:17 UTC
From: zaktherabbit
Topic: 180 Message: 180

Hi Guys

I have just uploaded some photos showing my repair work on replacing the two AGC detector diodes.

The radio is now undergoing a powered soak-test, prior to oscillator alignment (a trick i learnt in the repair industry - always allow a radio plenty of time to warm up before working on it, this also gives time for another brew)

A few hints for those intending to try these repairs -

1. Invest in a good low power, fine tipped iron, i use an Antex 18W iron, and a roll of medium width desoldering braid/wick. Dont try and remove these parts with a solder sucker! Also, learn the knack of freeing the part leg after using braid with a gentle push sideways (not downwards!) with a hot iron. The part should then gently lift out with a pair of pliers or tweezers.

2. Remember that the power leads for the battery pack go to large terminals, so use a more powerfull iron on those only, i use a 45w iron.

3. Take the time while the radio is open to inspect it thoroughly for dry (cold) joints, and correct these as you find them. Such faults are notoriously intermittent!

4. Clean off flux after soldering with a suitable non-residue cleaner.

Of course, whether changing these has fixed the fault i wont be able to say until its had plenty of time to actually fail again!

Martin G7MRV

181. Opinion please - 'Freecycle' type ham radio group idea

Yahoo group: electrichandbag
Date: 2009-11-02 16:42:23 UTC
From: zaktherabbit
Topic: 181 Message: 181

Hi all,

following a number of occasions, especially on this group, where requests for help have resulted in kind offers of needed parts, i have been considering the idea of setting up a group whose sole purpose would be to offer, request, and swap junk box items.

This would be based, loosely due to the broader reach, on the successful 'freecycle' network, which im sure many of you are familiar with. For those who are not, this is a network of local groups which allow Offered and Wanted posts, on the strict proviso that no money changes hands for any items.

It occured to me a similar scheme for us radio hams, especially those of us who like to build and repair, would be valuable in finding rare or unusal parts, and clearing out those junkboxes! However, because it would be national, not local, the rule regarding no monies would have to be limited to the item only, with postage perhaps paid but at cost. Ideally though of course exchange would be made wherever possible in person, especially for larger items.

I have talked to the Freecycle organisers, and although i cannot use the freecycle umbrella due to the groups nature, they were very supportive and gave permission to use their styles and rules, with some modification.

I would like to know peoples opinions on this idea please, and especially if anyone is aware of such a scheme in the UK already! I intend to set up the group shortly, and the more members we can get quickly the sooner we can become established.

Regards

Martin G7MRV

182. Re: AGC repairs - the saga continues...

Yahoo group: electrichandbag
Date: 2009-11-02 16:46:14 UTC
From: zaktherabbit
Topic: 180 Message: 182

Further to this, I carried out some alignments, and the radio is now back in the shack monitoring 144.300. So far though, sadly, theres been no activity, and with my current little halo im not able to get GB3VHF either. Unless of course, its because ive broken it in the process!

It did in fact turn out to be impossible to detect the CIOs with the 1w port of the Marconi. I really do need a proper stand alone counter!

Ive got a sked this evening with G7PZL though to give it a check out.

Martin G7MRV

--- In electrichandbag@yahoogroups.com, "zaktherabbit" <barfield673@...> wrote:
>
> Hi Guys
>
> I have just uploaded some photos showing my repair work on replacing the two AGC detector diodes.
>
> The radio is now undergoing a powered soak-test, prior to oscillator alignment (a trick i learnt in the repair industry - always allow a radio plenty of time to warm up before working on it, this also gives time for another brew)
>
> A few hints for those intending to try these repairs -
>
> 1. Invest in a good low power, fine tipped iron, i use an Antex 18W iron, and a roll of medium width desoldering braid/wick. Dont try and remove these parts with a solder sucker! Also, learn the knack of freeing the part leg after using braid with a gentle push sideways (not downwards!) with a hot iron. The part should then gently lift out with a pair of pliers or tweezers.
>
> 2. Remember that the power leads for the battery pack go to large terminals, so use a more powerfull iron on those only, i use a 45w iron.
>
> 3. Take the time while the radio is open to inspect it thoroughly for dry (cold) joints, and correct these as you find them. Such faults are notoriously intermittent!
>
> 4. Clean off flux after soldering with a suitable non-residue cleaner.
>
> Of course, whether changing these has fixed the fault i wont be able to say until its had plenty of time to actually fail again!
>
>
> Martin G7MRV
>

183. Re: [electrichandbag] Opinion please - 'Freecycle' type ham radio group idea

Yahoo group: electrichandbag
Date: 2009-11-02 18:07:42 UTC
From: Geoff Blake
Topic: 181 Message: 183

On Mon, 2 Nov 2009, zaktherabbit wrote:

> Hi all,
>
> following a number of occasions, especially on this group, where
> requests for help have resulted in kind offers of needed parts, i have
> been considering the idea of setting up a group whose sole purpose would
> be to offer, request, and swap junk box items.
>
> This would be based, loosely due to the broader reach, on the successful
> 'freecycle' network, which im sure many of you are familiar with. For
> those who are not, this is a network of local groups which allow Offered
> and Wanted posts, on the strict proviso that no money changes hands for
> any items.
>
> It occured to me a similar scheme for us radio hams, especially those of
> us who like to build and repair, would be valuable in finding rare or
> unusal parts, and clearing out those junkboxes! However, because it
> would be national, not local, the rule regarding no monies would have to
> be limited to the item only, with postage perhaps paid but at cost.
> Ideally though of course exchange would be made wherever possible in
> person, especially for larger items.
>
> I have talked to the Freecycle organisers, and although i cannot use the
> freecycle umbrella due to the groups nature, they were very supportive
> and gave permission to use their styles and rules, with some
> modification.
>
> I would like to know peoples opinions on this idea please, and
> especially if anyone is aware of such a scheme in the UK already! I
> intend to set up the group shortly, and the more members we can get
> quickly the sooner we can become established.
>
> Regards
>
> Martin G7MRV
>
Hi Martin,

There is a group "HamFreeCycle" or something like that which is mainly
USA based but allowed me to join from the UK.

To set a UK version up will, I think, be a good idea and you have my
support.

Geoff

--
Geoff Blake G8GNZ located near Chelmsford, Essex, U.K.
Please reply to: geoff(at)palaemon(dot)demon(dot)co(dot)uk
Using Linux on Intel & Linux or NetBSD on Sun Sparc platforms

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184. SSB Freq

Yahoo group: electrichandbag
Date: 2009-11-02 19:24:46 UTC
From: gi0gdp
Topic: 184 Message: 184

L3007 which tunes the PLL mixer oscillator probably needs an adjustment, there is hole in the PLL tin box lid to ease this adjustment (the one nearest to the memory select switch).All of this info is in the 290 manual.
Good luck.
Geoff GI0GDP

185. Re: SSB Freq

Yahoo group: electrichandbag
Date: 2009-11-02 21:02:38 UTC
From: Ted
Topic: 184 Message: 185

Thanks for the suggestions everyone, I will have a go at sorting this out and let you know the result. Don't like to ask about the agc problem which has been included in some of the comments - hope I don't have it.

Ted

--- In electrichandbag@yahoogroups.com, "gi0gdp" <gi0gdp@...> wrote:
>
> L3007 which tunes the PLL mixer oscillator probably needs an adjustment, there is hole in the PLL tin box lid to ease this adjustment (the one nearest to the memory select switch).All of this info is in the 290 manual.
> Good luck.
> Geoff GI0GDP
>

186. Re: SSB Freq

Yahoo group: electrichandbag
Date: 2009-11-02 21:35:40 UTC
From: zaktherabbit
Topic: 184 Message: 186

Good luck with it Ted,

make sure you have a suitable non-metallic trimming tool for the core, its a small slot and a bit fiddly to get exactly on frequency

My set is still off on SSB, despite the work i did earlier. Its taken me until now to verify it on-air, theres been no activity at all today! However my mate Andy confirmed it sounds good and clean on both USB and LSB, and is spot on on FM, just the carrier oscillators are out on both sidebands, making me have to tune quite a way out!

I wouldnt worry about the AGC Ted, if you had the fault you would already know!!! If your radio works as soon as you turn it on, your fine. If you have to wait 30sec, 5min, half hour or more, you have the AGC fault!

Martin G7MRV

--- In electrichandbag@yahoogroups.com, "Ted" <tedspires@...> wrote:
>
> Thanks for the suggestions everyone, I will have a go at sorting this out and let you know the result. Don't like to ask about the agc problem which has been included in some of the comments - hope I don't have it.
>
> Ted
>
> --- In electrichandbag@yahoogroups.com, "gi0gdp" <gi0gdp@> wrote:
> >
> > L3007 which tunes the PLL mixer oscillator probably needs an adjustment, there is hole in the PLL tin box lid to ease this adjustment (the one nearest to the memory select switch).All of this info is in the 290 manual.
> > Good luck.
> > Geoff GI0GDP
> >
>

187. Re: [electrichandbag] Re: SSB Freq

Yahoo group: electrichandbag
Date: 2009-11-02 22:05:41 UTC
From: Geoff Blake
Topic: 184 Message: 187

On Mon, 2 Nov 2009, Ted wrote:

> Thanks for the suggestions everyone, I will have a go at sorting this
> out and let you know the result. Don't like to ask about the agc problem
> which has been included in some of the comments - hope I don't have it.
>
Ted,

One point that you may not be aware of. How do you define the SSB or CW
frequency. In the case of FM or AM - carrier modes - there is a carrier
there to measure and the frequency of the carrier is - well - the
frequency of the carrier.....

> Ted
>
> --- In electrichandbag@yahoogroups.com, "gi0gdp" <gi0gdp@...> wrote:
> >
> > L3007 which tunes the PLL mixer oscillator probably needs an adjustment, there is hole in the PLL tin box lid to ease this adjustment (the one nearest to the memory select switch).All of this info is in the 290 manual.
> > Good luck.
> > Geoff GI0GDP
> >
>
>
>
>
> ------------------------------------
>
> Yahoo! Groups Links
>
>
>

--
Geoff Blake G8GNZ located near Chelmsford, Essex, U.K.
Please reply to: geoff(at)palaemon(dot)demon(dot)co(dot)uk
Using Linux on Intel & Linux or NetBSD on Sun Sparc platforms

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---

188. Re: [electrichandbag] Re: SSB Freq

Yahoo group: electrichandbag
Date: 2009-11-03 09:40:20 UTC
From: Geoff Blake
Topic: 184 Message: 188

On Mon, 2 Nov 2009, Geoff Blake wrote:

> On Mon, 2 Nov 2009, Ted wrote:
>
> > Thanks for the suggestions everyone, I will have a go at sorting this
> > out and let you know the result. Don't like to ask about the agc problem
> > which has been included in some of the comments - hope I don't have it.
> >
> Ted,
>
> One point that you may not be aware of. How do you define the SSB or CW
> frequency. In the case of FM or AM - carrier modes - there is a carrier
> there to measure and the frequency of the carrier is - well - the
> frequency of the carrier.....
>
Sorry, the above got away, it was not intended to be posted "as is".

I was going on to say that on SSB some manufacturers define the
transmitted "frequency" as being the centre frequency of the transmitted
signal, i.e. typically 1.5kHz above or below (LSB) the carrier frequency.

Geoff
--
Geoff Blake G8GNZ located near Chelmsford, Essex, U.K.
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----

189. Re: AGC repairs - back to the bench...

Yahoo group: electrichandbag
Date: 2009-11-06 23:21:10 UTC
From: zaktherabbit
Topic: 180 Message: 189

hey-ho! after all that hard work - turned on after only being off overnight, and bang, straight to FSD! Takes about 15sec to come good, although the last time i checked it it came down to half scale then went back up!

So, changing the diodes has had no effect, pity, as ive another 8 left!

The next task then will be a complete clean of the unit with isopropanol. Im halfway through building the new workshop bench, so should have somewhere decent to work soon

How very annoying!

Martin G7MRV

--- In electrichandbag@yahoogroups.com, "zaktherabbit" <barfield673@...> wrote:
>
> Further to this, I carried out some alignments, and the radio is now back in the shack monitoring 144.300. So far though, sadly, theres been no activity, and with my current little halo im not able to get GB3VHF either. Unless of course, its because ive broken it in the process!
>
> It did in fact turn out to be impossible to detect the CIOs with the 1w port of the Marconi. I really do need a proper stand alone counter!
>
> Ive got a sked this evening with G7PZL though to give it a check out.
>
>
> Martin G7MRV
>
> --- In electrichandbag@yahoogroups.com, "zaktherabbit" <barfield673@> wrote:
> >
> > Hi Guys
> >
> > I have just uploaded some photos showing my repair work on replacing the two AGC detector diodes.
> >
> > The radio is now undergoing a powered soak-test, prior to oscillator alignment (a trick i learnt in the repair industry - always allow a radio plenty of time to warm up before working on it, this also gives time for another brew)
> >
> > A few hints for those intending to try these repairs -
> >
> > 1. Invest in a good low power, fine tipped iron, i use an Antex 18W iron, and a roll of medium width desoldering braid/wick. Dont try and remove these parts with a solder sucker! Also, learn the knack of freeing the part leg after using braid with a gentle push sideways (not downwards!) with a hot iron. The part should then gently lift out with a pair of pliers or tweezers.

> >
> > 2. Remember that the power leads for the battery pack go to large terminals, so use a more powerfull iron on those only, i use a 45w iron.
> >
> > 3. Take the time while the radio is open to inspect it thoroughly for dry (cold) joints, and correct these as you find them. Such faults are notoriously intermittent!
> >
> > 4. Clean off flux after soldering with a suitable non-residue cleaner.
> >
> > Of course, whether changing these has fixed the fault i wont be able to say until its had plenty of time to actually fail again!
> >
> >
> > Martin G7MRV
> >
>

190. Re: AGC repairs - back to the bench...

Yahoo group: electrichandbag
Date: 2009-11-07 00:18:11 UTC
From: zaktherabbit
Topic: 180 Message: 190

Ive just been searching the 'net for anything on this fault i may have missed. Surprisingly, i came across an entry on a thread on eham i was involved in regarding this problem -

http://www.eham.net/forums/ModsAndRepairs/6573?page=2

the poster says a hardware reset cleared the fault on his! I cant actually believe it would, has anyone tried it?

I'll give it a go on mine tomorrow, but i dont hold any hope! I think its going to be a case of alternate local heat sourse/freezer spray to finally trick this little critter down, unless the wash works

as a side note, this occurs on switch on, so im going to try warming the pcb before turning on to see what happens!

Martin G7MRV

--- In electrichandbag@yahoogroups.com, "zaktherabbit" <barfield673@...> wrote:
>
> hey-ho! after all that hard work - turned on after only being off overnight, and bang, straight to FSD! Takes about 15sec to come good, although the last time i checked it it came down to half scale then went back up!
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> So, changing the diodes has had no effect, pity, as ive another 8 left!
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> The next task then will be a complete clean of the unit with isopropanol. Im halfway through building the new workshop bench, so should have somewhere decent to work soon
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> How very annoying!
>
>
> Martin G7MRV
>
> --- In electrichandbag@yahoogroups.com, "zaktherabbit" <barfield673@> wrote:
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> >
> > It did in fact turn out to be impossible to detect the CIOs with the 1w port of the Marconi. I really do need a proper stand alone counter!
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> > Ive got a sked this evening with G7PZL though to give it a check out.
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> >
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> > >
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> > > The radio is now undergoing a powered soak-test, prior to oscillator alignment (a trick i learnt in the repair industry - always allow a radio plenty of time to warm up before working on it, this also gives time for another brew)
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> > > A few hints for those intending to try these repairs -
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> > > 1. Invest in a good low power, fine tipped iron, i use an Antex 18W iron, and a roll of medium width desoldering braid/wick. Dont try and remove these parts with a solder sucker! Also, learn the knack of freeing the part leg after using braid with a gentle push sideways (not downwards!) with a hot iron. The part should then gently lift out with a pair of pliers or tweezers.
> > >
> > > 2. Remember that the power leads for the battery pack go to large terminals, so use a more powerfull iron on those only, i use a 45w iron.
> > >
> > > 3. Take the time while the radio is open to inspect it thoroughly for dry (cold) joints, and correct these as you find them. Such faults are notoriously intermittent!
> > >
> > > 4. Clean off flux after soldering with a suitable non-residue cleaner.
> > >
> > > Of course, whether changing these has fixed the fault i wont be able to say until its had plenty of time to actually fail again!
> > >
> > >
> > > Martin G7MRV
> > >
> >
>

191. Re: AGC repairs - back to the bench...

Yahoo group: electrichandbag
Date: 2009-11-09 11:28:04 UTC
From: g3vvt@aol.com
Topic: 180 Message: 191

Hi Martin,

I presume you have tried the modification put forward by Harry Leeming, G3LLL as published in PW August 2007 to cure your problem?

Regards,
Bob, G3VVT

192. Re: AGC repairs - back to the bench...

Yahoo group: electrichandbag
Date: 2009-11-09 17:34:15 UTC
From: zaktherabbit
Topic: 180 Message: 192

Hi Bob, yes Harry's fix was the first i used, worked for quite a while. Its more a medicine, treating the symptoms, though. IT now seems time to find the cause of the trouble and eliminate it directly.

For some reason, and i havent tested it out yet so this is purely theoretical, my intuition is guiding me toward the regulators!!! I wont know of course until i can stuff the thing full of probes and monitor the fault properly

Martin G7MRV

--- In electrichandbag@yahoogroups.com, g3vvt@... wrote:
>
> Hi Martin,
>
> I presume you have tried the modification put forward by Harry Leeming,
> G3LLL as published in PW August 2007 to cure your problem?
>
> Regards,
> Bob, G3VVT
>

193. Battery Box

Yahoo group: electrichandbag
Date: 2009-12-03 00:26:01 UTC
From: xzs5ham
Topic: 193 Message: 193

I have just bought an FT690 MK II minus the battery box - wonder if anyone has a spare they could flog me? Guessing this the same for all handbags Mk I & II's 290/690/790 - somebody please let me know it there's a difference.
Not too worried about condition as long as it clips on ok - I can fix corroded connections & have Araldite & paint to hand if needed!
Cheers, Jerry G4GGZ

194. Re: [electrichandbag] Battery Box

Yahoo group: electrichandbag
Date: 2009-12-03 08:21:48 UTC
From: Geoff Blake
Topic: 193 Message: 194

On Thu, 3 Dec 2009, xzs5ham wrote:

> I have just bought an FT690 MK II minus the battery box - wonder if
> anyone has a spare they could flog me? Guessing this the same for all
> handbags Mk I & II's 290/690/790 - somebody please let me know it
> there's a difference. Not too worried about condition as long as it
> clips on ok - I can fix corroded connections & have Araldite & paint to
> hand if needed! Cheers, Jerry G4GGZ

Jerry,

The removeable battery box is shared between the FT290RII, the FT690RII
and the FT790RII. The battery box is NOT suitable for use on the MKI
versions which have a integral battery holder.

Some three or four years back I needed to replace a MKII battery pack and
had great difficulty in sourcing a replacement.

Good Luck

Geoff

--
Geoff Blake G8GNZ located near Chelmsford, Essex, U.K.
Please reply to: geoff(at)palaemon(dot)demon(dot)co(dot)uk
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---

195. Re: AGC repairs - Regulators???

Yahoo group: electrichandbag
Date: 2009-12-03 22:37:39 UTC
From: zaktherabbit
Topic: 180 Message: 195

Out of interest, has anyone done any testing around the voltage regulators regarding the AGC fault?

Im being drawn to the idea of a cap or semiconductor in this section being at fault.

I now have the necessary materials (isopropanol and freezer spray) to get to work properly on this just as soon as i have time

Martin G7MRV

196. Charging

Yahoo group: electrichandbag
Date: 2010-01-14 00:09:55 UTC
From: mw0cvt
Topic: 196 Message: 196

Hi all

Can anyone tell me what is the voltage and current output of the original NC-11C charger for the FT-290R MK1.

Thanks

Rob

197. RE: [electrichandbag] Charging

Yahoo group: electrichandbag
Date: 2010-01-14 13:58:14 UTC
From: Geoff Blake
Topic: 196 Message: 197

-----Original Message-----
From: electrichandbag@yahoogroups.com
[mailto:electrichandbag@yahoogroups.com] On Behalf Of mw0cvt
Sent: 14 January 2010 00:10
To: electrichandbag@yahoogroups.com
Subject: [electrichandbag] Charging

Hi all

Can anyone tell me what is the voltage and current output of the original
NC-11C charger for the FT-290R MK1.

Hi Rob

I don't know about the original charger, but my "type specific" charger is
14V and 140mA constant current.

However I generally use a dV/dT type fast charger which charges up to 11
NiCd's or NimH. A 4000mA/hr pack takes around 2hr to charge fully from flat.

Geoff

--
Geoff Blake G8GNZ located near Chelmsford, Essex, U.K.
Please reply to: geoff(at)palaemon(dot)co(dot)uk
Using Linux on Intel & Linux or NetBSD on Sun Sparc platforms

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----

198. Re: [electrichandbag] Charging

Yahoo group: electrichandbag
Date: 2010-01-14 14:10:41 UTC
From: mw0cvt@aol.com
Topic: 196 Message: 198

Thanks Geoff for the info, I will have a look in my junk box for something close to that

73
Rob
MW0CVT

200. Re: Charging

Yahoo group: electrichandbag
Date: 2010-02-06 04:50:47 UTC
From: kf7bsf
Topic: 196 Message: 200

My FT-290RII uses an NC 26B rated for 13.05VDC at 165mA.

73 Gene KF7BSF

--- In electrichandbag@yahoogroups.com, "mw0cvt" <mw0cvt@...> wrote:
>
> Hi all
>
> Can anyone tell me what is the voltage and current output of the original NC-11C charger for the FT-290R MK1.
>
> Thanks
>
> Rob
>

201. Re: Looking for a FT-290

Yahoo group: electrichandbag
Date: 2010-02-06 05:25:07 UTC
From: kf7bsf
Topic: 139 Message: 201

After keeping my eyes on e-bay for months, I finally found an FT-290RII that met my needs. I spent a little more than I planned, but it arrived today. Inside the shipping box was an original Yaesu box and in there every piece originally sold with radio including all the manuals, spare fuses, and even the plastic bags. This unit looks brand new!

The only wear I can find are a few scratches on the bottom and a very small amount of corrosion in the battery box on one terminal which cleaned up rather nicely.

I'm looking forward to getting the unit on the air tomorrow.

73 Gene/KF7BSF

--- In electrichandbag@yahoogroups.com, "kf7bsf" <kf7bsf@...> wrote:
>
> I've been tracking this site, ebay, and several other sites trying to locate an FT-290 for sell. Does anyone have any leads or suggestions as to where I might find one of these rigs for sale?
>
> Gene/KF7BSF
>

202. Re: Looking for a FT-290

Yahoo group: electrichandbag
Date: 2010-02-07 07:01:05 UTC
From: kf7bsf
Topic: 139 Message: 202

Built a power cable today and made my first qso on the FT-290. Reports were quite positive.

The only issue I have is that the battery pack is not functioning properly. I found some corrosion in the battery case and the output voltage from 9 new 1.6 volts cells is barely 9V and drops quickly eve when testing with a VOM. I'll try cleaning up the connections in the case and retest.

Anyone else have these battery case issues?

Gene/KF7BSF

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>
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> The only wear I can find are a few scratches on the bottom and a very small amount of corrosion in the battery box on one terminal which cleaned up rather nicely.
>
> I'm looking forward to getting the unit on the air tomorrow.
>
> 73 Gene/KF7BSF
>
> --- In electrichandbag@yahoogroups.com, "kf7bsf" <kf7bsf@> wrote:
> >
> > I've been tracking this site, ebay, and several other sites trying to locate an FT-290 for sell. Does anyone have any leads or suggestions as to where I might find one of these rigs for sale?
> >
> > Gene/KF7BSF
> >
>

203. Re: Looking for a FT-290

Yahoo group: electrichandbag
Date: 2010-02-07 18:26:40 UTC
From: zaktherabbit
Topic: 139 Message: 203

Gene,

are you able to test the cells outside of the radio? Ive had corroded terminals and the extra resistance has reduced the available operating time but ive never noticed the voltage fall that fast, and certainly not when just on a VOM. It sounds to me like one of the new cells is a dud.

You say 1.6v cells, are these alkaline cells? Thta shouldnt make any difference in fact the measured voltage of the pack should be higher than with NiCd/NiMH cells.

Remember also that the external power connector acts as a switch to disconnect the batteries, this could need a clean (spray of contact cleaner)

Martin G7MRV

--- In electrichandbag@yahoogroups.com, "kf7bsf" <kf7bsf@...> wrote:
>
> Built a power cable today and made my first qso on the FT-290. Reports were quite positive.
>
> The only issue I have is that the battery pack is not functioning properly. I found some corrosion in the battery case and the output voltage from 9 new 1.6 volts cells is barely 9V and drops quickly eve when testing with a VOM. I'll try cleaning up the connections in the case and retest.
>
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> Gene/KF7BSF
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> --- In electrichandbag@yahoogroups.com, "kf7bsf" <kf7bsf@> wrote:
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> > After keeping my eyes on e-bay for months, I finally found an FT-290RII that met my needs. I spent a little more than I planned, but it arrived today. Inside the shipping box was an original Yaesu box and in there every piece originally sold with radio including all the manuals, spare fuses, and even the plastic bags. This unit looks brand new!
> >
> > The only wear I can find are a few scratches on the bottom and a very small amount of corrosion in the battery box on one terminal which cleaned up rather nicely.
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> > I'm looking forward to getting the unit on the air tomorrow.
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> > 73 Gene/KF7BSF
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> > --- In electrichandbag@yahoogroups.com, "kf7bsf" <kf7bsf@> wrote:
> > >
> > > I've been tracking this site, ebay, and several other sites trying to locate an

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> > >
> > > Gene/KF7BSF
> > >
> >
>

204. Re: Looking for a FT-290

Yahoo group: electrichandbag
Date: 2010-02-08 04:27:27 UTC
From: kf7bsf
Topic: 139 Message: 204

Martin,

I tested each cell individually they are all good and show stable voltage. I installed the c-cells into the battery pack and tested the power at the main battery contacts. The battery pack was NOT installed during testing, nor was any power cable plugged in.

My first test was zero volts. I remove the battery pack with the cells still in place and tested each cell individually from the positive terminal to the battery case contacts that contact the cells in the other case half. I checked the cells individually in both case halves.

All cells but one showed the same voltage when tested before installation. The contact/cell that had no voltage reading revealed some corrosion, so I cleaned it up. It appears that there is considerable resistance between the tension/contact spring and the rivet holding it in place. After a good cleaning I was able to get a fairly consistent reading.

I reassembled the unit and tested the power at the main contacts. The voltage was only 9v. I believe this is a marginal voltage at best and it was here that I noticed that the VOM would cause a drop in the voltage. I attached the battery case to the radio and there wasn't enough voltage to power the unit.

I proceeded to build a power cable to connect the FT-290 to my HF power supply and verified that the unit is working. I've spent most of today learning to program and operate the unit. The FT-290 is in great shape and functions very well.

I have ordered another battery pack. I was fortunate to find an NOS battery pack and FL-2025 online from another ham. They were pretty expensive (relatively speaking), but I couldn't pass up the chance to buy these NEW! :)

The defective battery pack will need to have the corroded rivet replaced or repaired in some way or replaced with an appropriate fastener. I should also run some test on the circuit controlling the charging/disconnect to make sure there is no damage there. If necessary I can use the old unit to attempt to build a NiHM cell pack.

If you can direct me to a schematic of the charging/disconnect circuit that would be my next step. I don't think I have a schematic for that unit.

Thanks for getting back to me. I'm excited to be an active part of the group. Now I need to get a tone board and some instructions for the MH-15 mic.

73 de Gene/KF7BSF

--- In electrichandbag@yahoogroups.com, "zaktherabbit" <barfield673@...> wrote:
>
> Gene,
>
> are you able to test the cells outside of the radio? Ive had corroded terminals and the extra resistance has reduced the available operating time but ive never noticed the voltage

fall that fast, and certainly not when just on a VOM. It sounds to me like one of the new cells is a dud.
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> You say 1.6v cells, are these alkaline cells? Thta shouldnt make any difference in fact the measured voltage of the pack should be higher than with NiCd/NiMH cells.
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> Remember also that the external power connector acts as a switch to disconnect the batteries, this could need a clean (spray of contact cleaner)
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> > > --- In electrichandbag@yahoogroups.com, "kf7bsf" <kf7bsf@> wrote:
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> > > >
> > > > Gene/KF7BSF
> > > >
> > >
> >
>

205. Desk mic for the FT-290

Yahoo group: electrichandbag
Date: 2010-02-08 04:29:28 UTC
From: kf7bsf
Topic: 205 Message: 205

Does anyone use the FT-290 as a base station? I'm interested in getting a desk mic for station operation. I have a nice Kenwood MC-60 that I might be able to adapt. Any information?

73 de Gene/KF7BSF

206. Re: Looking for a FT-290

Yahoo group: electrichandbag
Date: 2010-02-10 15:09:49 UTC
From: zaktherabbit
Topic: 139 Message: 206

Sorry Gene, i misread your post, didnt realise your using a mk2, my info was for a mk1.

It does sound like the rivet, so shouldnt be too hard to fix.

Martin

--- In electrichandbag@yahoogroups.com, "kf7bsf" <kf7bsf@...> wrote:
>
> Martin,
>
> I tested each cell individually they are all good and show stable voltage. I installed the c-cells into the battery pack and tested the power at the main battery contacts. The battery pack was NOT installed during testing, nor was any power cable plugged in.
>
> My first test was zero volts. I remove the battery pack with the cells still in place and tested each cell individually from the positive terminal to the battery case contacts that contact the cells in the other case half. I checked the cells individually in both case halves.
>
> All cells but one showed the same voltage when tested before installation. The contact/cell that had no voltage reading revealed some corrosion, so I cleaned it up. It appears that there is considerable resistance between the tension/contact spring and the rivet holding it in place. After a good cleaning I was able to get a fairly consistent reading.
>
> I reassembled the unit and tested the power at the main contacts. The voltage was only 9v. I believe this is a marginal voltage at best and it was here that I noticed that the VOM would cause a drop in the voltage. I attached the battery case to the radio and there wasn't enough voltage to power the unit.
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> I have ordered another battery pack. I was fortunate to find an NOS battery pack and FL-2025 online from another ham. They were pretty expensive (relatively speaking), but I couldn't pass up the chance to buy these NEW! :)
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> --- In electrichandbag@yahoogroups.com, "zaktherabbit" <barfield673@> wrote:
> >
> > Gene,
> >
> > are you able to test the cells outside of the radio? Ive had corroded terminals and the extra resistance has reduced the available operating time but ive never noticed the voltage fall that fast, and certainly not when just on a VOM. It sounds to me like one of the new cells is a dud.
> >
> > You say 1.6v cells, are these alkaline cells? Thta shouldnt make any difference in fact the measured voltage of the pack should be higher than with NiCd/NiMH cells.
> >
> > Remember also that the external power connector acts as a switch to disconnect the batteries, this could need a clean (spray of contact cleaner)
> >
> >
> > Martin G7MRV
> >
> > --- In electrichandbag@yahoogroups.com, "kf7bsf" <kf7bsf@> wrote:
> > >
> > > Built a power cable today and made my first qso on the FT-290. Reports were quite positive.
> > >
> > > The only issue I have is that the battery pack is not functioning properly. I found some corrosion in the battery case and the output voltage from 9 new 1.6 volts cells is barely 9V and drops quickly eve when testing with a VOM. I'll try cleaning up the connections in the case and retest.
> > >
> > > Anyone else have these battery case issues?
> > >
> > > Gene/KF7BSF
> > >
> > > --- In electrichandbag@yahoogroups.com, "kf7bsf" <kf7bsf@> wrote:
> > > >
> > > > After keeping my eyes on e-bay for months, I finally found an FT-290RII that met my needs. I spent a little more than I planned, but it arrived today. Inside the shipping box was an original Yaesu box and in there every piece originally sold with radio including all the manuals, spare fuses, and even the plastic bags. This unit looks brand new!
> > > >
> > > > The only wear I can find are a few scratches on the bottom and a very small amount of corrosion in the battery box on one terminal which cleaned up rather nicely.
> > > >
> > > > I'm looking forward to getting the unit on the air tomorrow.
> > > >
> > > > 73 Gene/KF7BSF

> > > >
> > > > --- In electrichandbag@yahoogroups.com, "kf7bsf" <kf7bsf@> wrote:
> > > > >
> > > > > I've been tracking this site, ebay, and several other sites trying to locate an FT-290 for sell. Does anyone have any leads or suggestions as to where I might find one of these rigs for sale?
> > > > > >
> > > > > > Gene/KF7BSF
> > > > > > >
> > > > > >
> > > >
> > >
>

207. Re: Looking for a FT-290

Yahoo group: electrichandbag
Date: 2010-02-10 16:08:28 UTC
From: kf7bsf
Topic: 139 Message: 207

Martin,

Sorry if wasn't clear about that. Is there a significant difference between the battery pack on the mk 1 and mk 2?

Gene/KF7BSF

--- In electrichandbag@yahoogroups.com, "zaktherabbit" <barfield673@...> wrote:
>
> Sorry Gene, i misread your post, didnt realise your using a mk2, my info was for a mk1.
>
> It does sound like the rivet, so shouldnt be too hard to fix.
>
> Martin
>
> --- In electrichandbag@yahoogroups.com, "kf7bsf" <kf7bsf@> wrote:
> >
> > Martin,
> >
> > I tested each cell individually they are all good and show stable voltage. I installed the c-cells into the battery pack and tested the power at the main battery contacts. The battery pack was NOT installed during testing, nor was any power cable plugged in.
> >
> > My first test was zero volts. I remove the battery pack with the cells still in place and tested each cell individually from the positive terminal to the battery case contacts that contact the cells in the other case half. I checked the cells individually in both case halves.
> >
> > All cells but one showed the same voltage when tested before installation. The contact/cell that had no voltage reading revealed some corrosion, so I cleaned it up. It appears that there is considerable resistance between the tension/contact spring and the rivet holding it in place. After a good cleaning I was able to get a fairly consistent reading.
> >
> > I reassembled the unit and tested the power at the main contacts. The voltage was only 9v. I believe this is a marginal voltage at best and it was here that I noticed that the VOM would cause a drop in the voltage. I attached the battery case to the radio and there wasn't enough voltage to power the unit.
> >
> > I proceeded to build a power cable to connect the FT-290 to my HF power supply and verified that the unit is working. I've spent most of today learning to program and operate the unit. The FT-290 is in great shape and functions very well.
> >
> > I have ordered another battery pack. I was fortunate to find an NOS battery pack and FL-2025 online from another ham. They were pretty expensive (relatively speaking), but I couldn't pass up the chance to buy these NEW! :)

> >
> > The defective battery pack will need to have the corroded rivet replaced or repaired in some way or replaced with an appropriate fastener. I should also run some test on the circuit controlling the charging/disconnect to make sure there is no damage there. If necessary I can use the old unit to attempt to build a NiHM cell pack.
> >
> > If you can direct me to a schematic of the charging/disconnect circuit that would be my next step. I don't think I have a schematic for that unit.
> >
> > Thanks for getting back to me. I'm excited to be an active part of the group. Now I need to get a tone board and some instructions for the MH-15 mic.
> >
> > 73 de Gene/KF7BSF
> >
> > --- In electrichandbag@yahoogroups.com, "zaktherabbit" <barfield673@> wrote:
> > >
> > > Gene,
> > >
> > > are you able to test the cells outside of the radio? Ive had corroded terminals and the extra resistance has reduced the available operating time but ive never noticed the voltage fall that fast, and certainly not when just on a VOM. It sounds to me like one of the new cells is a dud.
> > >
> > > You say 1.6v cells, are these alkaline cells? Thta shouldnt make any difference in fact the measured voltage of the pack should be higher than with NiCd/NiMH cells.
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> > > Remember also that the external power connector acts as a switch to disconnect the batteries, this could need a clean (spray of contact cleaner)
> > >
> > >
> > > Martin G7MRV
> > >
> > > --- In electrichandbag@yahoogroups.com, "kf7bsf" <kf7bsf@> wrote:
> > > >
> > > > Built a power cable today and made my first qso on the FT-290. Reports were quite positive.
> > > >
> > > > The only issue I have is that the battery pack is not functioning properly. I found some corrosion in the battery case and the output voltage from 9 new 1.6 volts cells is barely 9V and drops quickly eve when testing with a VOM. I'll try cleaning up the connections in the case and retest.
> > > >
> > > > Anyone else have these battery case issues?
> > > >
> > > > Gene/KF7BSF
> > > >
> > > > --- In electrichandbag@yahoogroups.com, "kf7bsf" <kf7bsf@> wrote:
> > > > >
> > > > > After keeping my eyes on e-bay for months, I finally found an FT-290RII that met my needs. I spent a little more than I planned, but it arrived today. Inside the shipping

box was an original Yaesu box and in there every piece originally sold with radio including all the manuals, spare fuses, and even the plastic bags. This unit looks brand new!
> > > > >
> > > > > The only wear I can find are a few scratches on the bottom and a very small amount of corrosion in the battery box on one terminal which cleaned up rather nicely.
> > > > >
> > > > > I'm looking forward to getting the unit on the air tomorrow.
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> > > > > >
> > > > > --- In electrichandbag@yahoogroups.com, "kf7bsf" <kf7bsf@> wrote:
> > > > > > >
> > > > > > I've been tracking this site, ebay, and several other sites trying to locate an FT-290 for sell. Does anyone have any leads or suggestions as to where I might find one of these rigs for sale?
> > > > > > >
> > > > > > Gene/KF7BSF
> > > > > > >
> > > > > > >
> > > > >
> > > >
> > >
> >
>

208. RE: [electrichandbag] Re: Looking for a FT-290

Yahoo group: electrichandbag
Date: 2010-02-10 16:33:09 UTC
From: Geoff Blake
Topic: 139 Message: 208

Hi Folks,

I have been following this thread out of interest.

One thing that I spotted was the line " I proceeded to build a power cable to connect the FT-290 to my HF power supply and verified that the unit is working. " This worried me a little, if you connect the battery directly to a "HF power supply" (presumed to be ~13.8V @ 22A or so) it is likely that you could damage/destroy the batteries.

Refurbishing the MkII battery packs - I have three! - the spring to rivet junction can be problematic but normally surrenders to persistent cleaning. I have replaced the dead NiCd's in two of the packs with NimH cells. I use a four stage intelligent charger to recharge the batteries.

Geoff

-----Original Message-----
From: electrichandbag@yahoogroups.com
[mailto:electrichandbag@yahoogroups.com] On Behalf Of zaktherabbit
Sent: 10 February 2010 15:10
To: electrichandbag@yahoogroups.com
Subject: [electrichandbag] Re: Looking for a FT-290

Sorry Gene, i misread your post, didnt realise your using a mk2, my info was for a mk1.

It does sound like the rivet, so shouldnt be too hard to fix.

Martin

.--
Geoff Blake G8GNZ located near Chelmsford, Essex, U.K.
Please reply to: geoff(at)palaemon(dot)co(dot)uk
Using Linux on Intel & Linux or NetBSD on Sun Sparc platforms

Please avoid sending me Word or PowerPoint attachments.
See <http://www.gnu.org/philosophy/no-word-attachments.html>

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---

209. Re: Looking for a FT-290

Yahoo group: electrichandbag
Date: 2010-02-10 22:26:15 UTC
From: kf7bsf
Topic: 139 Message: 209

Geoff,

I was referring to the cable required to power the radio via the 12v dc port, NOT through the charger port. I needed to build the 12v power connector to verify that I had a working unit. However, I was surprised these ports where located so close together which would definite make for nasty accident.

The rivet in my battery case is damaged (as in about 1/3 of it is missing). It will definitely need to be replaced at some point. I haven't tried to refurbish anything yet since a have a new pack on the way. I've been spending most of my time just enjoying my new acquisition. This is really a fine little radio!

I would be very interested in learning more about your NimH setup, especially the charger. I like the idea of converting the case and taking advantage of the Nimh technology. Did you purchase a 4 stage charger or build your own?

Gene/KF7BSF

--- In electrichandbag@yahoogroups.com, "Geoff Blake" <geoff@...> wrote:
>
> Hi Folks,
>
> I have been following this thread out of interest.
>
> One thing that I spotted was the line " I proceeded to build a power cable
> to connect the FT-290 to my HF power supply and verified that the unit is
> working. " This worried me a little, if you connect the battery directly to
> a "HF power supply" (presumed to be ~13.8V @ 22A or so) it is likely that
> you could damage/destroy the batteries.
>
> Refurbishing the MkII battery packs - I have three! - the spring to rivet
> junction can be problematic but normally surrenders to persistent cleaning.
> I have replaced the dead NiCd's in two of the packs with NimH cells. I use a
> four stage intelligent charger to recharge the batteries.
>
> Geoff
>
> -----Original Message-----
> From: electrichandbag@yahoogroups.com
> [mailto:electrichandbag@yahoogroups.com] On Behalf Of zaktherabbit
> Sent: 10 February 2010 15:10
> To: electrichandbag@yahoogroups.com
> Subject: [electrichandbag] Re: Looking for a FT-290
>
> Sorry Gene, i misread your post, didnt realise your using a mk2, my info was
> for a mk1.

>
> It does sound like the rivet, so shouldnt be too hard to fix.
>
> Martin
>
>
> .--
> Geoff Blake G8GNZ located near Chelmsford, Essex, U.K.
> Please reply to: geoff(at)palaemon(dot)co(dot)uk
> Using Linux on Intel & Linux or NetBSD on Sun Sparc platforms
>
> Please avoid sending me Word or PowerPoint attachments.
> See <http://www.gnu.org/philosophy/no-word-attachments.html>
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> its attachments to any third party without the prior consent
> of the sender.
>
> --
>

210. RE: [electrichandbag] Re: Looking for a FT-290

Yahoo group: electrichandbag
Date: 2010-02-11 10:59:58 UTC
From: Geoff Blake
Topic: 139 Message: 210

-----Original Message-----
From: electrichandbag@yahoogroups.com
[mailto:electrichandbag@yahoogroups.com] On Behalf Of kf7bsf
Sent: 10 February 2010 22:26
To: electrichandbag@yahoogroups.com
Subject: [electrichandbag] Re: Looking for a FT-290

> Geoff,

> I was referring to the cable required to power the radio via the 12v dc port, NOT through the charger port. I needed to build the 12v power connector to verify that I had a working unit. > However, I was surprised these ports where located so close together which would definite make for nasty accident.

Hi Gene, group,

Sorry if I inferred that you had connected the batteries to the PSU, I was more concerned that somebody else may do so and thus damage the cells. I am sure that you are aware that the cells may "decompose" violently when subject to excessive high current charging. Incidentally, the three radio's that I have are a FT290RII, a FT690RII, and a FT790RII, and I know very little about the Mk I battery arrangements.

> The rivet in my battery case is damaged (as in about 1/3 of it is missing). It will definitely need to be replaced at some point. I haven't tried to refurbish anything yet since a have a new
> pack on the way. I've been spending most of my time just enjoying my new acquisition. This is really a fine little radio!

Yes, I like all three of mine! I mainly use my 290 and 790 as drivers for microwave transverters although I now have a FT817 which has a number of advantages. I don't know if you have a boot and shoe repairer locally, if so, they may be able replace the rivet.

> I would be very interested in learning more about your NimH setup, especially the charger. I like the idea of converting the case and taking advantage of the Nimh technology. Did you
> purchase a 4 stage charger or build your own?

I did nothing special to use NimH cells, just replaced the missing NiCd's. The main reasons for choosing NimH''s was that they were cheaper and had the higher capacity 4000mA/hr. The charger was left over from a work project and was marketed by a Swedish Company "Mascot" . At least one poster here has suggested that it is cheaper to buy a switched mode multi stage charger than to make one! I also have a 145mA constant current charger (came with one of the radios) which I have to time manually.

Geoff

--
Geoff Blake G8GNZ located near Chelmsford, Essex, U.K.
Please reply to: geoff(at)palaemon(dot)co(dot)uk
Using Linux on Intel & Linux or NetBSD on Sun Sparc platforms

Please avoid sending me Word or PowerPoint attachments.
See <http://www.gnu.org/philosophy/no-word-attachments.html>

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---

211. Re: Looking for a FT-290

Yahoo group: electrichandbag
Date: 2010-02-11 16:01:11 UTC
From: kf7bsf
Topic: 139 Message: 211

--- In electrichandbag@yahoogroups.com, "Geoff Blake" <geoff@...> wrote:
>
> -----Original Message-----
> From: electrichandbag@yahoogroups.com
> [mailto:electrichandbag@yahoogroups.com] On Behalf Of kf7bsf
> Sent: 10 February 2010 22:26
> To: electrichandbag@yahoogroups.com
> Subject: [electrichandbag] Re: Looking for a FT-290
>
> Sorry if I inferred that you had connected the batteries to the PSU, I was
> more concerned that somebody else may do so and thus damage the cells. I am
> sure that you are aware that the cells may "decompose" violently when
> subject to excessive high current charging.

Geoff, I suspected you were tossing in a word of caution for all. I sometimes forget that the audience is so varied. I did not take it personally and certainly appreciate your response.

> I don't know if you have a boot and shoe repairer locally, if
> so, they may be able replace the rivet.

I used to do a bit of leather repair and have the tools necessary to replace the rivet. It's good to hear that this works as a repair. I will document my repair and post the results for others.

> The charger was left over from a work project and was marketed by a Swedish
> Company "Mascot" . At least one poster here has suggested that it is cheaper to buy a
> switched mode multi stage charger than to make one! I also have a 145mA constant
> current charger (came with one of the radios) which I have to time manually.

My net-search has indicated that the multi-stage charger is the way to go. I'm trying to locate one that can be fitted for the battery pack in the factory fashion. The initial investment may be a bit higher, but I think the Nimhs will pay for themselves rather quickly.

Thanks for the feed back. It would appear that most of the users here are from Great Britain! Is that true? I'm just wondering why the FT-290 and it's siblings are so much more popular there.

72 de Gene/KF7BSF

212. Some Mk2 questions and comments...

Yahoo group: electrichandbag
Date: 2010-02-14 20:12:36 UTC
From: kf7bsf
Topic: 212 Message: 212

Group,

I am certainly enjoying the Mk2. Working SSB on 2 meters is quite fun. I'm looking forward to exploring more and getting a horizontally polarized antenna to see if I can get out a bit further.

Questions:

1) Does anyone have a spare shoulder strap kicking about?

2) After installing the FL-2025 I am seeing some odd behavior in the power output. On FM simplex I can clearly see the power level change on my external SWR/Power meter when switching from high to low power, but on SSB/CW I see no power output on my meter regardless of the power level setting. On-the-air reports definitely notice the difference, so I'm certain the amp works, but I'm puzzled that I'm getting no reading on the meter.

Can anyone explain this? Has anyone else noticed this behavior?

73 de Gene/KF7BSF

213. Re: Some Mk2 questions and comments...

Yahoo group: electrichandbag
Date: 2010-02-15 04:09:30 UTC
From: kf7bsf
Topic: 212 Message: 213

--- In electrichandbag@yahoogroups.com, "kf7bsf" <kf7bsf@...> wrote:
>
> Group,
>
> I am certainly enjoying the Mk2. Working SSB on 2 meters is quite fun. I'm looking forward to exploring more and getting a horizontally polarized antenna to see if I can get out a bit further.
>
> Questions:
>
> 1) Does anyone have a spare shoulder strap kicking about?
>
> 2) After installing the FL-2025 I am seeing some odd behavior in the power output. On FM simplex I can clearly see the power level change on my external SWR/Power meter when switching from high to low power, but on SSB/CW I see no power output on my meter regardless of the power level setting. On-the-air reports definitely notice the difference, so I'm certain the amp works, but I'm puzzled that I'm getting no reading on the meter.
>
> Can anyone explain this? Has anyone else noticed this behavior?

I'm going to answer my own question on this one. I dug out my SWR/watt meter manual to discover that without a carrier tone, the watt meter will not function except to register voice peaks (and even then not accurately). Plugging in my cw key allows me to very the power output in cw/ssb modes.

>
> 73 de Gene/KF7BSF
>

214. RE: [electrichandbag] Re: Some Mk2 questions and comments...

Yahoo group: electrichandbag
Date: 2010-02-15 07:59:48 UTC
From: Geoff Blake
Topic: 212 Message: 214

-----Original Message-----
From: electrichandbag@yahoogroups.com
[mailto:electrichandbag@yahoogroups.com] On Behalf Of kf7bsf
Sent: 15 February 2010 04:10
To: electrichandbag@yahoogroups.com
Subject: [electrichandbag] Re: Some Mk2 questions and comments...

--- In electrichandbag@yahoogroups.com, "kf7bsf" <kf7bsf@...> wrote:
>
> Group,
>
> I am certainly enjoying the Mk2. Working SSB on 2 meters is quite fun. I'm looking forward to exploring more and getting a horizontally polarized antenna to see if I can get out a bit further.
>
> Questions:
>
> 1) Does anyone have a spare shoulder strap kicking about?
>
> 2) After installing the FL-2025 I am seeing some odd behavior in the power output. On FM simplex I can clearly see the power level change on my external SWR/Power meter when switching from high to low power, but on SSB/CW I see no power output on my meter regardless of the power level setting. On-the-air reports definitely notice the difference, so I'm certain the amp works, but I'm puzzled that I'm getting no reading on the meter.
>
> Can anyone explain this? Has anyone else noticed this behavior?

I'm going to answer my own question on this one. I dug out my SWR/watt meter manual to discover that without a carrier tone, the watt meter will not function except to register voice peaks (and even then not accurately). Plugging in my cw key allows me to very the power output in cw/ssb modes.

Hi Gene,

This is a regular in the FT817/897 groups and answered every week or so. You are quite right, in carrier modes, like FM and CW (and AM where available), your power meter will give some sort of indication or the existence of RF.

Using SSB there is little carrier (-30dB or so) and this will not show. SSB speech will cause the power meter to indicate, but not the full power, 2.5W in the case of the FT290RII and this is due to the peaky nature of the human voice. All voices are different and your voice will give between 25 and 50% indication on the internal meter, and similar on an external meter. To get a

proper reading you will need a proper peak reading power meter. Do not expect an accurate reading though, +/- 10-20% accuracy is what you should expect.

Have fun with the 290

73

Geoff

--
Geoff Blake G8GNZ located near Chelmsford, Essex, U.K.
Please reply to: geoff(at)palaemon(dot)co(dot)uk
Using Linux on Intel & Linux or NetBSD on Sun Sparc platforms

Please avoid sending me Word or PowerPoint attachments.
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of the sender.

---

215. Programming Tone Boards

Yahoo group: electrichandbag
Date: 2010-02-19 05:58:49 UTC
From: kf7bsf
Topic: 215 Message: 215

At the risk of being a one man user group I have another question.

I received my FTS-7A tone board today and I've read the manual through several times, but I have one question for which I cannot find a straight forward answer.

Am I limited to a single tone among all the tones or is there some way that I can program different tones for different frequencies in memory?

I realize that compared to today's modern radios that the FT-290 may not be the best choice for repeater use(and I do have a another 2 meter radio), but I do have a few repeaters I would like to operate on with the 290 and as luck would have it the tones are never the same.

Any help is appreciated. Gene/KF7BSF

216. Re: Looking for a FT-290

Yahoo group: electrichandbag
Date: 2010-02-24 13:40:51 UTC
From: david269140
Topic: 139 Message: 216

They are quite popular for a number of reasons. In no particular order.

The FT-290 is relatively cheap and a good starter rig for ssb/cw/fm.

Many were (and possibly still are) used for portable microwaving as a driver for a 10GHz transverter. Many references can be found in microwave newsletters and the FT-290.

There are five RSGB 'backpacker'144MHz contests held throughout the year in the UK. Maximum power 3W output.
Also the Practical Wireless 144MHz contest - also 3W output.
The FT-290 is often quoted as being ideal for these contests.

73 David G4ASR

> Thanks for the feed back. It would appear that most of the users here are from Great Britain! Is that true? I'm just wondering why the FT-290 and it's siblings are so much more popular there.
>
> 72 de Gene/KF7BSF

217. Wanted FT-690RII Power Amp

Yahoo group: electrichandbag
Date: 2010-03-12 14:51:42 UTC
From: kf7bsf
Topic: 217 Message: 217

Anyone out there have an FL-6010 Power amp for an FT-690RII? Note this is a Mk2 model so it's the 20watt amp that clips on the back of the radio in place of the battery pack.

Gene/KF7BSF

218. Mutek front end....do they make any difference?

Yahoo group: electrichandbag
Date: 2010-03-12 21:12:44 UTC
From: g1drp
Topic: 218 Message: 218

Hi All,
I have 2 Ft290 MK1s. One has a Mutek front end, the other doesn't. there is only a very small difference in sensitivity between the two. Was the Mutek front end just meant to improve the dynamic range of the receiver?
Cheers,
Ian G1DRP

219. Re: Mutek front end....do they make any difference?

Yahoo group: electrichandbag
Date: 2010-03-13 12:18:09 UTC
From: gi0gdp
Topic: 218 Message: 219

--- In electrichandbag@yahoogroups.com, "g1drp" <i.m.hand@...> wrote:
>
> Hi All,
> I have 2 Ft290 MK1s. One has a Mutek front end, the other doesn't. there is only a very small difference in sensitivity between the two. Was the Mutek front end just meant to improve the dynamic range of the receiver?
> Cheers,
> Ian G1DRP
>

How did you measure the difference in sensitivity?, the best answer to this question may come from Chris Bartram.
regards
Geoff

220. Re: Mutek front end....do they make any difference?

Yahoo group: electrichandbag
Date: 2010-03-13 16:47:08 UTC
From: g1drp
Topic: 218 Message: 220

Hi Geoff,
Just by comparison on SSB and FM. Since changing my job 4 years ago, I have not had access to any decent RF test gear.
Cheers,
Ian G1DRP

--- In electrichandbag@yahoogroups.com, "gi0gdp" <gi0gdp@...> wrote:
>
>
>
> --- In electrichandbag@yahoogroups.com, "g1drp" <i.m.hand@> wrote:
> >
> > Hi All,
> > I have 2 Ft290 MK1s. One has a Mutek front end, the other doesn't. there is only a very small difference in sensitivity between the two. Was the Mutek front end just meant to improve the dynamic range of the receiver?
> > Cheers,
> > Ian G1DRP
> >
>
> How did you measure the difference in sensitivity?, the best answer to this question may come from Chris Bartram.
> regards
> Geoff
>

221. FTS-7 Mismatched connectors!

Yahoo group: electrichandbag
Date: 2010-03-20 23:37:17 UTC
From: kf7bsf
Topic: 221 Message: 221

Had planned to install the FTS-7 Tone Board in my FT-690RII today, but discovered that the connector in the radio is different than that on the tone board.

Has anyone encountered this?

Looking at the tone board, it has the same connector as my FT-290RII with the tapered corners on the IC side of the connector. I was under the impression that these unit take the same FTS-7 Tone Board.

The FT-690RII has a rectangular connector with all the pins that slide "across" each other, while the Tone Board has pins that insert "into" the cable connector.

Any clues would be helpful.

73 de Gene/KF7BSF

222. Looking for a FT-790RII

Yahoo group: electrichandbag
Date: 2010-04-02 22:21:33 UTC
From: kf7bsf
Topic: 222 Message: 222

I'm looking for a FT-790RII. Anyone have one?

223. FT290R MK1 for sale

Yahoo group: electrichandbag
Date: 2010-04-03 20:31:03 UTC
From: g1drp
Topic: 223 Message: 223

I have 3 FT290R radios for sale as one lot.
One is in good condition with a Mutek front end and mic.
One is very nice with original mic and manual.
One is tatty with no telescopic antenna but has mic and manual.
Asking £125 for all three. Payppal or bank trnasfer.
73,
Ian G1DRP

224. FT690R for sale

Yahoo group: electrichandbag
Date: 2010-04-03 20:35:19 UTC
From: g1drp
Topic: 224 Message: 224

Tidy FT690R MK1 with mic for sale. £75. Paypal preferred.
73,
Ian G1DRP

225. Re: [electrichandbag] FT290R MK1 for sale

Yahoo group: electrichandbag
Date: 2010-04-03 22:05:05 UTC
From: ALLENCrdr@aol.com
Topic: 223 Message: 225

Hi Ian

Would you have any idea of the postage cost to Dartford in kent.

Regards
Allen
M1cxk

226. Re: FT290R MK1 for sale

Yahoo group: electrichandbag
Date: 2010-04-04 14:49:17 UTC
From: g1drp
Topic: 223 Message: 226

Hi Mick,

£10 by Standard Parcels with suitable insurance.
Cheers,
Ian G1DRP

--- In electrichandbag@yahoogroups.com, ALLENCrdr@... wrote:
>
> Hi Ian
>
> Would you have any idea of the postage cost to Dartford in kent.
>
> Regards
> Allen
> M1cxk
>

227. Re: [electrichandbag] Looking for a FT-790RII

Yahoo group: electrichandbag
Date: 2010-04-05 02:00:35 UTC
From: Bill Aycock
Topic: 222 Message: 227

SORRY-- BIG mistake-- I have a 690 !
Bill--W4BSG

From: "kf7bsf" <kf7bsf@...>
Sent: Friday, April 02, 2010 5:21 PM
To: <electrichandbag@yahoogroups.com>
Subject: [electrichandbag] Looking for a FT-790RII

> I'm looking for a FT-790RII. Anyone have one?
>
>
>
> ------------------------------------
>
> Yahoo! Groups Links
>
>
>

228. Re: [electrichandbag] Looking for a FT-790RII

Yahoo group: electrichandbag
Date: 2010-04-05 01:57:44 UTC
From: Bill Aycock
Topic: 222 Message: 228

I have one. It works, has the Amp, Antenna and Battery box, but no mobile mount. I might sell it, but don't know an appropriate price.
Bill--W4BSG

From: "kf7bsf" <kf7bsf@...>
Sent: Friday, April 02, 2010 5:21 PM
To: <electrichandbag@yahoogroups.com>
Subject: [electrichandbag] Looking for a FT-790RII

> I'm looking for a FT-790RII. Anyone have one?
>
>
>
> ------------------------------------
>
> Yahoo! Groups Links
>
>
>

229. Re: Programming Tone Boards

Yahoo group: electrichandbag
Date: 2010-04-05 16:14:23 UTC
From: Kevin
Topic: 215 Message: 229

Hello Gene

I have checked out the manual for the mk2 and as far as I can see the FTS-7 tone board only allows one tone at a time to be generated as the output tone is set by the array of seven DIP switches all of which are used to set one tone. The memories and the call button only call this preset frequency as required.

So sorry to say Gene I think you are stuck unless the repeaters also use DTMF codes which you could input via the mic ie the Yaesu MH-15C8 or similar.

Best regards

Kevin G6UCY

--- In electrichandbag@yahoogroups.com, "kf7bsf" <kf7bsf@...> wrote:
>
> At the risk of being a one man user group I have another question.
>
> I received my FTS-7A tone board today and I've read the manual through several times, but I have one question for which I cannot find a straight forward answer.
>
> Am I limited to a single tone among all the tones or is there some way that I can program different tones for different frequencies in memory?
>
> I realize that compared to today's modern radios that the FT-290 may not be the best choice for repeater use(and I do have a another 2 meter radio), but I do have a few repeaters I would like to operate on with the 290 and as luck would have it the tones are never the same.
>
> Any help is appreciated. Gene/KF7BSF
>

230. Re: FTS-7 Mismatched connectors!

Yahoo group: electrichandbag
Date: 2010-04-07 19:59:46 UTC
From: Kevin
Topic: 221 Message: 230

Hello Gene

I think I might have the answer to your question. Amongst the paperwork the came with my new Mk2 today was a notice from Yaesu which dealt with the tone squelch units on the mk2. The notice said that due to the original connectors becoming prematurely obsolete Yaesu had to fit new ones that were not compatible. The units with the new connector were called FTS-7A

The notice said to fit the FTS-7A to make sure that the last six digits in the serial number are above those listed below

FT-290RII 300000
FT-690RII 290000
FT-790TII 140000

Units with serial numbers below those listed need the original FTS-7.

Hope this proves helpful

Best regards

Kevin G6UCY

--- In electrichandbag@yahoogroups.com, "kf7bsf" <kf7bsf@...> wrote:
>
> Had planned to install the FTS-7 Tone Board in my FT-690RII today, but discovered that the connector in the radio is different than that on the tone board.
>
> Has anyone encountered this?
>
> Looking at the tone board, it has the same connector as my FT-290RII with the tapered corners on the IC side of the connector. I was under the impression that these unit take the same FTS-7 Tone Board.
>
> The FT-690RII has a rectangular connector with all the pins that slide "across" each other, while the Tone Board has pins that insert "into" the cable connector.
>
> Any clues would be helpful.
>
> 73 de Gene/KF7BSF
>

231. Re: FTS-7 Mismatched connectors!

Yahoo group: electrichandbag
Date: 2010-04-08 14:13:31 UTC
From: kf7bsf
Topic: 221 Message: 231

Kevin,

That makes perfect sense. So I guess my question now is this: Did anyone make an adapter? If not I can try to work a trade I suppose to get the non-A model tone board.

Thanks for a thorough response.

Gene/KF7BSF

--- In electrichandbag@yahoogroups.com, "Kevin" <rigeltoo@...> wrote:
>
> Hello Gene
>
>
> I think I might have the answer to your question. Amongst the paperwork the came with my new Mk2 today was a notice from Yaesu which dealt with the tone squelch units on the mk2. The notice said that due to the original connectors becoming prematurely obsolete Yaesu had to fit new ones that were not compatible. The units with the new connector were called FTS-7A
>
> The notice said to fit the FTS-7A to make sure that the last six digits in the serial number are above those listed below
>
> FT-290RII 300000
> FT-690RII 290000
> FT-790TII 140000
>
> Units with serial numbers below those listed need the original FTS-7.
>
> Hope this proves helpful
>
> Best regards
>
> Kevin G6UCY
>
> --- In electrichandbag@yahoogroups.com, "kf7bsf" <kf7bsf@> wrote:
> >
> > Had planned to install the FTS-7 Tone Board in my FT-690RII today, but discovered that the connector in the radio is different than that on the tone board.
> >
> > Has anyone encountered this?
> >
> > Looking at the tone board, it has the same connector as my FT-290RII with the tapered corners on the IC side of the connector. I was under the impression that these unit take the same FTS-7 Tone Board.
> >

> > The FT-690RII has a rectangular connector with all the pins that slide "across" each other, while the Tone Board has pins that insert "into" the cable connector.
> >
> > Any clues would be helpful.
> >
> > 73 de Gene/KF7BSF
> >
>

232. CTCSS for FT290 Mk 1

Yahoo group: electrichandbag
Date: 2010-04-13 09:38:52 UTC
From: davidg4irq
Topic: 232 Message: 232

Having bought a 'fixer-upper' recently, I realised that the main shortcoming of the FT290 Mk1 is the lack of CTCSS for repeater use.

Following a web trawl for something suitable, I came across the following circuit which uses a PIC to generate the tones. The clever part is that it uses the 12-way memory switch to select the required tone from the front panel, so there is no need to keep opening up the rig when you need to change tone.

The original article refers to installing it where my radio has its Mutek board, but it is possible to fit it in front of the memory back-up battery if you use small components and careful design.

Hopefully this will be of interest to Mk 1 owners who would like a CTCSS facility.

The link to the article is:

www.spikey-mike.com/radio/ctcss.html

If you don't have access to a PIC programmer, I may even be persuaded to program the PIC for you if you can supply the chip and suitable pre-paid return packaging. (I may live to regret this!)

73 de David Bobbett, G4IRQ

(Oh - and apologies if this has been posted before)

233. Hello, and help!

Yahoo group: electrichandbag
Date: 2010-04-13 17:43:55 UTC
From: Gordon JC Pearce
Topic: 233 Message: 233

Hi list,
I picked up an FT-290R at a rally at the weekend, which is is pretty reasonable condition physically (few wee scratches, battery contacts a bit scabby) and transmits and receives very well. However, the display isn't saying anything sensible - usually just a backwards "F" in the middle. I did a quick search around the 'net, and tried cleaning up the contacts and rubber strip. This didn't help matters. I searched the archives of this list, and found that someone else had a similar problem that turned out to be the chip on the display PCB.

So, my questions are this - how likely is it that the display driver chips fail? Is it possible that something like the lithium battery failing could cause these symptoms?

I tried the radio out on air by setting the frequency with my frequency counter. I'm only a few miles from my local 2m repeater, so the internal whip aerial got me into it and I was able to have a couple of QSOs with some of the usual repeater locals. The audio on receive and transmit sounds phenomenal. I just want to be able to see where I'm going...

Thanks

Gordon MM0YEQ

234. Re: [electrichandbag] Hello, and help!

Yahoo group: electrichandbag
Date: 2010-04-13 20:35:57 UTC
From: G4IZS
Topic: 233 Message: 234

Hi Gordon,

I guess I might be the person who had a driver chip fail!

The LCD was perfectly fine - the battery was fine - the transceiver was fine, worked as you describe and had never been abused. I could see the data being sent to the driver chip but nothing sensible emerged. All connections were checked on both "sides" of the chip.
When I replaced the chip all worked as one would hope. I can only surmise the chip died ....

As it happens I was a Reliability Engineer in my working days. One thing I did was to predict chip failure rates (and use this data to tell the authorities if it was safe to fly in passenger aircraft, for example). While there is "black magic" involved in the process it does rely on science and the physics and chemistry of failure. Yes, it is perfectly possible for a chip to fail without apparent cause, but if you look inside there are many reasons why chips fail. They do not even have to be powered for failures to arise. I would predict a random failure rate of maybe 10 failures per million hours for that chip, so, ever so roughly, maybe 1 radio in 50 might suffer the fault (remember, ever so roughly), but if there is a weakness in its design/manufacture this number could be much, much worse. Since there are no records of the performance, no-one will know if I am right or wrong!

I found a scrap radio and further sacrificed it. The repaired radio still works.

73
Ron, G4IZS

----- Original Message -----
From: Gordon JC Pearce
To: electrichandbag@yahoogroups.com
Sent: Tuesday, April 13, 2010 6:43 PM
Subject: [electrichandbag] Hello, and help!

Hi list,
I picked up an FT-290R at a rally at the weekend, which is is pretty reasonable condition physically (few wee scratches, battery contacts a bit scabby) and transmits and receives very well. However, the display isn't saying anything sensible - usually just a backwards "F" in the middle. I did a quick search around the 'net, and tried cleaning up the contacts and rubber strip. This didn't help matters. I searched the archives of this list, and found that someone else had a similar problem that turned out to be the chip on the display PCB.

So, my questions are this - how likely is it that the display driver chips fail? Is it possible that something like the lithium battery failing could cause these symptoms?

I tried the radio out on air by setting the frequency with my frequency counter. I'm only a few miles from my local 2m repeater, so the internal whip aerial got me into it and I was able to have a couple of QSOs with some of the usual repeater locals. The audio on receive and transmit sounds phenomenal. I just want to be able to see where I'm going...

Thanks

Gordon MM0YEQ

235. Re: [electrichandbag] Hello, and help!

Yahoo group: electrichandbag
Date: 2010-04-16 22:46:53 UTC
From: Gordon JC Pearce
Topic: 233 Message: 235

On Tue, 2010-04-13 at 21:35 +0100, G4IZS wrote:
> □
>
> Hi Gordon,
>
> I guess I might be the person who had a driver chip fail!

It was indeed ;-)

> The LCD was perfectly fine - the battery was fine - the
> transceiver was fine, worked as you describe and had never been
> abused. I could see the data being sent to the driver chip but nothing
> sensible emerged. All connections were checked on both "sides" of the
> chip.
> When I replaced the chip all worked as one would hope. I can only
> surmise the chip died ....

Do you have any information on the chip? Possibly even a data sheet?
There doesn't appear to be a lot connecting it to the CPU; maybe I can
figure out something suitable.

I suppose the first thing to try is to see if I can find a display,
display PCB or even just the chip. After that, well... maybe devise
some sort of replacement. A microcontroller and some sort of really
small LCD from a phone, possibly.

Are dead LCD controllers a common problem in the IC-[267]90 family?

Gordon MM0YEQ

236. Re: [electrichandbag] Hello, and help!

Yahoo group: electrichandbag
Date: 2010-04-18 07:20:27 UTC
From: G4IZS
Topic: 233 Message: 236

Hi Gordon,
I believe I did find some information on the chip but do not have it now. No, not much connects the chip to the CPU.

Have you checked the control lines from the microprocessor are not compromised? Use a 'scope and check both ends of the lines and put the probes lightly onto the "shoulders" of each chip. If one or more lines are not active then lift the connecting wire and make sure ... You can buzz through the lines to the LCD itself but make sure you use a low voltage device, and probably you should avoid using a conventional multimeter.

I am certain there are several ways of resurrecting the display function, but would they "fit" the case? It would be fairly easy to do something on the outside. I believe the best way is almost certainly to locate a (hopefully) inexpensive, damaged or otherwise not working 290 and hopefully you might find a good decoder chip inside.

Before you do any of this are you certain the processor chip is indeed working well, the transceiver on frequency and so on? If there is more than one fault .....

I have no knowledge at all concerning the longevity of chips in the family. I do know they were manufactured at a time when the life of chips was suspect. (Incidentally it is probably worse today.)

I would imagine you could program a PIC to substitute for the decoder chip itself, or maybe better, the microprocessor and decoder at the same time. You might then be tempted to provide the code to the rest of us!

73,
Ron, G4IZS
----- Original Message -----
From: Gordon JC Pearce
To: electrichandbag@yahoogroups.com
Sent: Friday, April 16, 2010 11:46 PM
Subject: Re: [electrichandbag] Hello, and help!

On Tue, 2010-04-13 at 21:35 +0100, G4IZS wrote:
> □
>
> Hi Gordon,
>
> I guess I might be the person who had a driver chip fail!

It was indeed ;-)

> The LCD was perfectly fine - the battery was fine - the
> transceiver was fine, worked as you describe and had never been
> abused. I could see the data being sent to the driver chip but nothing
> sensible emerged. All connections were checked on both "sides" of the

> chip.
> When I replaced the chip all worked as one would hope. I can only
> surmise the chip died ....

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I suppose the first thing to try is to see if I can find a display, display PCB or even just the chip. After that, well... maybe devise some sort of replacement. A microcontroller and some sort of really small LCD from a phone, possibly.

Are dead LCD controllers a common problem in the IC-[267]90 family?

Gordon MM0YEQ

237. AGC Problem

Yahoo group: electrichandbag
Date: 2010-04-19 02:09:40 UTC
From: telemech46
Topic: 237 Message: 237

My FT290 has been showing the symptoms of the AGC problem for a while, where after so long the s meter drops back to normal. The other week it stayed across at FSD, and would not recover however long you waited. I tried a micro reset, as descibed in the user manual, and it has now cleared this fault. The reciever works fine, and I can here the angus beacon flat band from w.yorks.

For those with a faulty display, it may be worth trying this first before resorting to other measures.

regards

Neil G4TCZ

238. FT-790RII overmodulation on transmit

Yahoo group: electrichandbag
Date: 2010-04-23 07:30:33 UTC
From: kf7bsf
Topic: 238 Message: 238

I finally located a 790 mk2 and performed my preliminary tests on it tonight. The rx is good, but on transmit the signal reports indicated a lot of distortion. By speaking offside the mic at an arms length away the reports were greatly improved.

I was transmitting w/the battery pack, fresh batteries, and an external dual band vertical antenna.

I tested 3 different mics, all yeasu (MH-15D8, MH-15C8, and YM-47) with similar results. One of these mics (the MH-15C8) is used daily on my FT-290RII with good reports and my normal mic position is 3~4 inches from my mouth. My suspicion is that the internal mic preamp gain is too high.

1) Does anyone have or know the location of a service manual for the 290/690/790 Mk2s?
2) Is anyone aware of the procedure for adjusting the mic gain on these radios? I assume this is an internal adjustment if it exists at all.
3) Are there any common component failures related to the problem I describe?

Otherwise this is a very clean unit and came with the 25w amp, a battery pack, and the Mh-15D8

Any feed back would be greatly appreciated.

Gene/KF7BSF

239. Re: FT-790RII overmodulation on transmit

Yahoo group: electrichandbag
Date: 2010-04-23 12:20:59 UTC
From: g3vvt@aol.com
Topic: 238 Message: 239

Hi Gene,

Think the problem you have is over deviation which seemed common problem on this series of radio. Have found some set unbelievably high.

Ideally you need a service monitor or deviation meter to check and make any necessary adjustment. Otherwise another radio is needed, preferably with narrow filters or use the old dodge of receiving through an SSB radio to get it to sound OK. The normal FT290/790 deviation standard is +/-4.5kHz deviation, though you may elect to go for less if the usage warrants this. In the UK we have a mix of 25 and 12.5kHz standards, so I use a deviation of +/-3kHz for speech and +/- 250Hz for CTCSS on all my old FM amateur radios to fit in with both camps. Note the speech and CTCSS are additive so set the speech with the CTCSS off and vise-versa. The total comes out at +/-3.25kHz when both are operating which will fit into the normal 7.5kHz IF filter bandwidth found on our 12.5kHz standard LMR/PMR radios. For normal LMR/PMR the deviation should not exceed +/-2.5kHz with 12.5kHz channel spacing equipment.

Think I have the service information somewhere for the FT290 mkII which is basically similar, but have so far not located it. However my rough notes made in about 2000 on the subject of setting the deviation on this radio are:

The deviation pot is VR05 which is located on the speaker side of the case. When viewed from above is 2" from the RHS next to a plug and socket and 2" back (from maybe the front as notes not clear). Clockwise increases deviation and anti clock decreases. Some radios are reversed in this adjustment just to be awkward! Did adjust an FT290mkII on one of our offshore Islands at the time and found no difficulty in locating the deviation pre-set control.

Hope that helps and will forward any information I find on the mk II radio. The mk1 is no problem as the instruction manual had good amount of service information and the schematic included where the mkII had nothing at all.

Regards,
Bob, G3VVT

240. Re: FT-790RII overmodulation on transmit

Yahoo group: electrichandbag
Date: 2010-04-24 05:18:38 UTC
From: kf7bsf
Topic: 238 Message: 240

Bob,

I appreciate your response. I'm trying to read up and understand what you're talking about, but I get the gist of it. I've tracked down some information online, but service information definitely appears to be rare for this model.

I would appreciate any materials you come up with, meanwhile I will try to understand this radio a bit better.

73 de Gene/KF7BSF

241. RE: [electrichandbag] FT690R for sale

Yahoo group: electrichandbag
Date: 2010-05-02 17:22:21 UTC
From: Thomas Trout
Topic: 224 Message: 241

To: electrichandbag@yahoogroups.com
From: i.m.hand@...
Date: Sat, 3 Apr 2010 20:35:19 +0000
Subject: [electrichandbag] FT690R for sale

Tidy FT690R MK1 with mic for sale. £75. Paypal preferred.
73,
Ian G1DRP

_____
http://clk.atdmt.com/UKM/go/197222280/direct/01/
Do you have a story that started on Hotmail? Tell us now

242. FT-290R-II Battery charger circuit needed

Yahoo group: electrichandbag
Date: 2010-05-06 16:16:01 UTC
From: Aron
Topic: 242 Message: 242

Hi Folks!

I've just bought a Mk-II rig & 9 pcs of 1800mAh capacyty NiCd rechargeable C batteries. The same type was used originally in its battery pack. But I do not have a suitable charger for this 10,8V/1800mAh pack. I need help with a good & simple Nicad automatic charger circuit useable for my FT-290R-II rig's battery pack.
TNX & '73! de Aron, HA8LUA

243. FT-290R testing displays

Yahoo group: electrichandbag
Date: 2010-05-14 08:28:23 UTC
From: gordonjcp
Topic: 243 Message: 243

Hi there,
I picked up a display for my FT-290R off eBay, but it does even less than the display I already have. The control lines seem to be doing approximately the right thing although without a datasheet for the controller IC it's hard to tell what that is.

Is there anyone on the list who can test the displays in an otherwise known-good FT-[267]90R, so I can tell if a) I need a display at all, and b) if I've been sold a duff display?

Gordon MM0YEQ

244. Bulb replacement help needed

Yahoo group: electrichandbag
Date: 2010-05-19 09:02:38 UTC
From: mw0cvt
Topic: 244 Message: 244

Hello

I need to replace the display bulb in my FT290 MK1, I have instructions from the internet, my question is can anyone supply me with the bulb spec and image so I can get one before stripping the set down? Can anyone also tell me if there is any way an LED can be used for longer life.

Thanks in advance

Rob
MW0CVT

245. Re: Bulb replacement help needed

Yahoo group: electrichandbag
Date: 2010-05-19 17:18:39 UTC
From: Richard
Topic: 244 Message: 245

--- In electrichandbag@yahoogroups.com, "mw0cvt" <mw0cvt@...> wrote:
>
> Hello
>
> I need to replace the display bulb in my FT290 MK1, I have instructions from the internet, my question is can anyone supply me with the bulb spec and image so I can get one before stripping the set down? Can anyone also tell me if there is any way an LED can be used for longer life.
>
> Thanks in advance
>
> Rob
> MW0CVT
>

Hi Rob, Go to the files section and you can download the NEW LIFE file and you will find all you need to answer your question
73 gm0grd.

246. FT-290RII

Yahoo group: electrichandbag
Date: 2010-05-19 21:00:43 UTC
From: Antonios Kekalos
Topic: 246 Message: 246

I have an FT-290RII and unable to locate the microphone. I haven't had any luck with Google. Can anyone tell me where I can get a replacement? Thank you.

--
Tony, N4RNI
Traverse City, MI
SWLR-RN072
EN74es

I'm apathetic, but I don't care

247. Re: FT-290RII

Yahoo group: electrichandbag
Date: 2010-05-21 13:24:32 UTC
From: g3vvt@aol.com
Topic: 246 Message: 247

Hi Tony,

Believe that the FT-290RII uses a similar microphone to the original FT-290R. Mine came with a YM-47 dynamic microphone that has UP/DOWN buttons, a lock to disable the functions on the rear and with the seven pin Foster microphone connector. Would think that the more common Yaesu MH-1B8 as used on their HF radios of the period could be adapted. This comes with the 8 pin Foster microphone connector and would require the connections to be identified and this to be replaced with the 7 pin type. Whilst not stocked by all component suppliers the 7 pin Foster microphone connector is still available if you shop around.

The Yaesu VHF multimode 2m mobile of the time the FT-480R used the YM-40 microphone, again with an 8 pin Foster connector and have used various microphones with this including the Adonis electret desk microphone, MH-1B8, etc. Unlike more modern radios the older ones apart from some Icom models are fairly acceptable to using other types of microphone.

Regards,
Bob, G3VVT

248. Re: [electrichandbag] Re: FT-290RII

Yahoo group: electrichandbag
Date: 2010-05-21 18:47:44 UTC
From: Antonios Kekalos
Topic: 246 Message: 248

Thank you, Bob. As luck would have it, I dug mine up from a dark corner in our basement. Actually, I'm quite surprised the radio still works as it's been in our basement, hidden away, forgotten by me, for over 14 years. Thanks again.

On Fri, May 21, 2010 at 9:24 AM, <g3vvt@...> wrote:

>
>
> Hi Tony,
>
> Believe that the FT-290RII uses a similar microphone to the original
> FT-290R. Mine came with a YM-47 dynamic microphone that has UP/DOWN buttons,
> a lock to disable the functions on the rear and with the seven pin Foster
> microphone connector. Would think that the more common Yaesu MH-1B8 as used
> on their HF radios of the period could be adapted. This comes with the 8 pin
> Foster microphone connector and would require the connections to be
> identified and this to be replaced with the 7 pin type. Whilst not stocked
> by all component suppliers the 7 pin Foster microphone connector is still
> available if you shop around.
>
> The Yaesu VHF multimode 2m mobile of the time the FT-480R used the YM-40
> microphone, again with an 8 pin Foster connector and have used various
> microphones with this including the Adonis electret desk microphone, MH-1B8,
> etc. Unlike more modern radios the older ones apart from some Icom models
> are fairly acceptable to using other types of microphone.
>
> Regards,
> Bob, G3VVT
>
>

--
Tony, N4RNI
Traverse City, MI
SWLR-RN072
EN74es

I'm apathetic, but I don't care

249. CTCSS in a Mk1 FT290R

Yahoo group: electrichandbag
Date: 2010-06-10 23:25:48 UTC
From: GD1MIP
Topic: 249 Message: 249

hello, I am a new subscriber. I have a Mk1 290. I want to fit CTCSS.

I have a CTCSS board / kit. I was wondering if anyone has done it and can give tips please. I note there is a loose multi plug next to the switch board (Scan and tone switches) what does this do?

thanks Andy

250. Re: CTCSS in a Mk1 FT290R

Yahoo group: electrichandbag
Date: 2010-06-11 14:49:41 UTC
From: Richard
Topic: 249 Message: 250

--- In electrichandbag@yahoogroups.com, "GD1MIP" <gd1mip@...> wrote:
>
> hello, I am a new subscriber. I have a Mk1 290. I want to fit CTCSS.
>
> I have a CTCSS board / kit. I was wondering if anyone has done it and can give tips please. I note there is a loose multi plug next to the switch board (Scan and tone switches) what does this do?
>
> thanks Andy
>
Hi Andy, Take a look at message 232 in this forum. There is a link to how to fit a ctcss unit to a mk1 290.
73 GM0GRD.

251. USB noise level and lack of signals?

Yahoo group: electrichandbag
Date: 2010-06-12 13:21:25 UTC
From: voltspermeter
Topic: 251 Message: 251

My mark 1 has developed a problem with the USB switched position. The usual level of audio noise has dropped considerably, and USB signals are no longer heard. As a first guess the lowered audio noise on this switch position makes me wonder if the USB crystal has gone low activity, and the local oscillator signal has failed. LSB and all other functions are OK.
Before I dismantle the rig, I thought I'd ask "the experts" if this is a known problem in these sets.
If so where might be the best place to find a replacement? Do Yaesu still support this rig?

Keith, VK6JT

252. working ssb sats

Yahoo group: electrichandbag
Date: 2010-06-15 11:13:30 UTC
From: John
Topic: 252 Message: 252

Does anyone have experience working ssb satellites with a 290R Mk2 and 790r mk2 units? I've been trying AO-7 and I can hear it but I haven't been able to hear my own signal. I'm only running on batteries so my signal output is low. I've worked many FM birds with 5 watts so I know a lot of power isn't needed. I haven't had a chance to try HO-68 yet- it's a strong satellite and may work better for me. I have the clamp on linears for both rigs so perhaps I'll have to resort to using those and a gel battery.

Thanks,
John Greusel
KC9OJV

253. battery power 290/790

Yahoo group: electrichandbag
Date: 2010-06-19 10:43:27 UTC
From: John
Topic: 253 Message: 253

I'm trying to work satellites and also some band openings on 2 meters while carrying my radios outdoors. I have noticed that with the c cell battery pack I don't put out enough power to work anyone over about 30 miles SSB simplex and the sats don't hear me. I have the linear amps for my 290 mk2 and my 790 mk2 but I don't know the best approach to keep them portable and yet use at least one linear. How big a gel cell do I need and any suggestions for a means of carrying, carting two radios (one with linear) a gel battery, digital recorder, and microphone? Anyone care to share a picture of their portable setup? How far can you transmit "barefoot" with your battery pack in SSB mode? Also has anyone adapted a newer style 8 pin microphone from a more modern yaesu? My mics are getting a little beat.

Thanks,
John
KC9OJV

254. Re: battery power 290/790

Yahoo group: electrichandbag
Date: 2010-06-19 10:57:50 UTC
From: zaktherabbit
Topic: 253 Message: 254

John,

I dont have experience with the SSB sats, so i cant comment there, but you dont mention the type of antennas you are using? The 1/4wl telescopic/rubber ducks on the sets are of little use except for local FM work. A simple home made 3 element yagi would work wonders for the band openings, especially if you can arrange a simple mast to get it up 10-15ft. For the sats something like an 'arrow' dual band yagi would be ideal i think, and these too can be easily homebrewed.

If your using the clamp on linear, a simple and portable power pack can be made using 2x 6v 7Ahr SLABs in series, fitted in a plastic box with handle, including of course a suitable fuse and holder, power switch and connectors. Many designs for this, and the suitable chargers, on the web, or in the ARRL handbook

Martin G7MRV

--- In electrichandbag@yahoogroups.com, "John" <greusel@...> wrote:
>
> I'm trying to work satellites and also some band openings on 2 meters while carrying my radios outdoors. I have noticed that with the c cell battery pack I don't put out enough power to work anyone over about 30 miles SSB simplex and the sats don't hear me. I have the linear amps for my 290 mk2 and my 790 mk2 but I don't know the best approach to keep them portable and yet use at least one linear. How big a gel cell do I need and any suggestions for a means of carrying, carting two radios (one with linear) a gel battery, digital recorder, and microphone? Anyone care to share a picture of their portable setup? How far can you transmit "barefoot" with your battery pack in SSB mode? Also has anyone adapted a newer style 8 pin microphone from a more modern yaesu? My mics are getting a little beat.
>
> Thanks,
> John
> KC9OJV
>

255. Re: USB noise level and lack of signals?

Yahoo group: electrichandbag
Date: 2010-06-25 21:14:13 UTC
From: ajpripley
Topic: 251 Message: 255

Before you resort to dismantling, mine did something very similar a while back. I found a connector problem - the Molex style ones, and contact cleaner did the trick.

--- In electrichandbag@yahoogroups.com, "voltspermeter" <hector.pascal@...> wrote:
>
> My mark 1 has developed a problem with the USB switched position. The usual level of audio noise has dropped considerably, and USB signals are no longer heard. As a first guess the lowered audio noise on this switch position makes me wonder if the USB crystal has gone low activity, and the local oscillator signal has failed. LSB and all other functions are OK.
> Before I dismantle the rig, I thought I'd ask "the experts" if this is a known problem in these sets.
> If so where might be the best place to find a replacement? Do Yaesu still support this rig?
>
> Keith, VK6JT
>

256. Re: CTCSS in a Mk1 FT290R

Yahoo group: electrichandbag
Date: 2010-06-28 14:39:19 UTC
From: Paul
Topic: 249 Message: 256

Take a look at message 72 and the photo's on the Photo section....

--- In electrichandbag@yahoogroups.com, "GD1MIP" <gd1mip@...> wrote:
>
> hello, I am a new subscriber. I have a Mk1 290. I want to fit CTCSS.
>
> I have a CTCSS board / kit. I was wondering if anyone has done it and can give tips please. I note there is a loose multi plug next to the switch board (Scan and tone switches) what does this do?
>
> thanks Andy
>

257. 100 Milestone!

Yahoo group: electrichandbag
Date: 2010-07-04 09:39:06 UTC
From: zaktherabbit
Topic: 257 Message: 257

We have just passed the 100 member milestone!

But - theres still not a lot of discussion going on! Time to start posting and replying, lets get this group busy!

73
G7MRV

258. EME

Yahoo group: electrichandbag
Date: 2010-07-04 12:40:56 UTC
From: kj4noo
Topic: 258 Message: 258

Does anyone use the FT-290RII for EME ? I'm toying with getting into EME on a small scale with a single yagi , 300W amp with pre-amp and using ground gain to help. How sensitive is the receiver on these ?

259. Re: [electrichandbag] Re: USB noise level and lack of signals?

Yahoo group: electrichandbag
Date: 2010-07-04 14:14:56 UTC
From: Hector Pascal
Topic: 251 Message: 259

Many thanks for that information. I did "diagnostically" wobble the relevant connectors the last time I looked at this problem, but with no joy. I'll check again and let you know if I find the same problem.

On Sat, Jun 26, 2010 at 5:14 AM, ajpripley <ajpripley@...> wrote:

>
>
> Before you resort to dismantling, mine did something very similar a while
> back. I found a connector problem - the Molex style ones, and contact
> cleaner did the trick.
>
>
> --- In electrichandbag@yahoogroups.com <electrichandbag%40yahoogroups.com>,
> "voltspermeter" <hector.pascal@...> wrote:
> >
> > My mark 1 has developed a problem with the USB switched position. The
> usual level of audio noise has dropped considerably, and USB signals are no
> longer heard. As a first guess the lowered audio noise on this switch
> position makes me wonder if the USB crystal has gone low activity, and the
> local oscillator signal has failed. LSB and all other functions are OK.
> > Before I dismantle the rig, I thought I'd ask "the experts" if this is a
> known problem in these sets.
> > If so where might be the best place to find a replacement? Do Yaesu still
> support this rig?
> >
> > Keith, VK6JT
> >
>
>
>

260. EME

Yahoo group: electrichandbag
Date: 2010-07-04 14:57:34 UTC
From: JOHN GREUSEL
Topic: 258 Message: 260

I think they have acceptable sensitivity and a low amount of internal noise. I was comparing my FT-290mk2 to a VR-500 yesterday. I was running both through a HX-240 transverter and listening to 10 meters with the preamp turned on. There was very little difference in sensitivity and the VR-500 is a pretty "hot" little receiver. Can you hear EME with what you have already?

John
KC9OJV

261. Re: EME

Yahoo group: electrichandbag
Date: 2010-07-04 18:29:22 UTC
From: kj4noo
Topic: 258 Message: 261

I still have to build the yagi. I guess that I could try monitoring with my 2m Ringo Ranger omni antenna but I doubt that I would have much luck. I already have the 290RII and the Mirage B-2530-G amp. 73 Jeff KJ4NOO

--- In electrichandbag@yahoogroups.com, JOHN GREUSEL <greusel@...> wrote:
>
> I think they have acceptable sensitivity and a low amount of internal noise. I was comparing my FT-290mk2 to a VR-500 yesterday. I was running both through a HX-240 transverter and listening to 10 meters with the preamp turned on. There was very little difference in sensitivity and the VR-500 is a pretty "hot" little receiver. Can you hear EME with what you have already?
>
> John
> KC9OJV
>

262. Re: EME

Yahoo group: electrichandbag
Date: 2010-07-04 19:32:41 UTC
From: zaktherabbit
Topic: 258 Message: 262

I havent tried mine for EME, but at last years RSGB convention i attended a lecture of the use of JT65 mode (i think!) for QRP/simple moonbounce. A demo sked was arranged, using a single large 2m yagi on a bent 10ft pole! The setup was far from ideal as there were buildings blocking the best view of the moon but signals were received in the UK from the US and vice versa, although with that setup a full QSO wasnt possible.

Perhaps this approach would be worth a try?

Martin G7MRV

--- In electrichandbag@yahoogroups.com, "kj4noo" <kj4noo@...> wrote:
>
> I still have to build the yagi. I guess that I could try monitoring with my 2m Ringo Ranger omni antenna but I doubt that I would have much luck. I already have the 290RII and the Mirage B-2530-G amp. 73 Jeff KJ4NOO
>
> --- In electrichandbag@yahoogroups.com, JOHN GREUSEL <greusel@> wrote:
> >
> > I think they have acceptable sensitivity and a low amount of internal noise. I was comparing my FT-290mk2 to a VR-500 yesterday. I was running both through a HX-240 transverter and listening to 10 meters with the preamp turned on. There was very little difference in sensitivity and the VR-500 is a pretty "hot" little receiver. Can you hear EME with what you have already?
> >
> > John
> > KC9OJV
> >
>

263. Re: EME

Yahoo group: electrichandbag
Date: 2010-07-04 23:22:28 UTC
From: kj4noo
Topic: 258 Message: 263

Yes from what I've read with the software, a single yagi and the added effect of ground gain I should be able to at least work some of the big gun stations with the large antenna arrays. I want to try it before I put major $$$$ into an antenna setup ! 73 Jeff KJ4NOO

--- In electrichandbag@yahoogroups.com, "zaktherabbit" <barfield673@...> wrote:
>
> I havent tried mine for EME, but at last years RSGB convention i attended a lecture of the use of JT65 mode (i think!) for QRP/simple moonbounce. A demo sked was arranged, using a single large 2m yagi on a bent 10ft pole! The setup was far from ideal as there were buildings blocking the best view of the moon but signals were received in the UK from the US and vice versa, although with that setup a full QSO wasnt possible.
>
> Perhaps this approach would be worth a try?
>
>
> Martin G7MRV

264. FT690r on JT65?

Yahoo group: electrichandbag
Date: 2010-07-22 16:53:12 UTC
From: jon_g4fut
Topic: 264 Message: 264

Anyone using the FT690r for JT65 on 6 meters? If so I'd be interested to know how you have connected the Signalink, if thats what you use.
Regards
Jon G4FUT

265. overmodulation FT-290 mk2

Yahoo group: electrichandbag
Date: 2010-07-26 00:57:04 UTC
From: John
Topic: 265 Message: 265

Recently I was told my signal sounded like I had RF feedback. I had someone transmit and I listened from outside with a small scanner- a VR-500. On SSB it sounds robotic like it is overmodulated and I'm not sure it's RF feedback after all. Could this be SSB deviation and is that something I can adjust ad hoc by listening. Hasanyone else had this problem and what was the solution? Has anyone replaced all or most of the electrolytics in these sets?

Thanks,

John Greusel
KC9OJV

266. service depot for FT-290R mk2

Yahoo group: electrichandbag
Date: 2010-07-26 12:11:21 UTC
From: John
Topic: 266 Message: 266

Short of someone saying changing the electrolytics will cure my over mod on SSB I'd like to find a place to service it-my FT-290mk2. Has anyone on this group had luck with Yaesu service or an independent? I don't have a problem shipping to Europe- the set is small enough and light enough that it make that plausible. The signal sounds almost robotic and over mod is the best way I can describe it. SSB and FM both work but SSB has terrible transmit audio.

Thanks,

John Greusel
KC9OJV

267. Re: service depot for FT-290R mk2

Yahoo group: electrichandbag
Date: 2010-07-27 00:41:04 UTC
From: sireland63
Topic: 266 Message: 267

I had some receive problems with my ft290R that I traced to a couple of dry electros in the audio amplifier. I hadn't touched this radio for 10 years and was getting back into the hobby. When I started to have trouble on transmit as well it sounded like distortion on ssb and low diviation on FM. I bit the bullet and just replaced all electros on the main board. I yanked them out with a pair of pliers, desoldered the legs that were left dangling on the board, replaced them with new ones and cleaned up any gunge that spilt out of the old mangled electro. There wasn't much gunge as most had gone dry. Problem was solved. I only replaced the ones that were resonably accessible. Took 3 hours work and was mainly the 1uF and 10uF capacitors. The minature electros I sourced from Radio Spares (RS) but should be easily available elsewhere. Give it a go!

Regards

Steve
VK2MD

--- In electrichandbag@yahoogroups.com, "John" <greusel@...> wrote:
>
> Short of someone saying changing the electrolytics will cure my over mod on SSB I'd like to find a place to service it-my FT-290mk2. Has anyone on this group had luck with Yaesu service or an independent? I don't have a problem shipping to Europe- the set is small enough and light enough that it make that plausible. The signal sounds almost robotic and over mod is the best way I can describe it. SSB and FM both work but SSB has terrible transmit audio.
>
> Thanks,
>
> John Greusel
> KC9OJV
>

268. FT690 and external linear

Yahoo group: electrichandbag
Date: 2010-07-28 15:45:25 UTC
From: jon_g4fut
Topic: 268 Message: 268

Has anyone attached an external linear to the FT690r, and I am not referring to the 6020. Is there a PTT connector on the rig; I don't seem to be able to see one and the circuit diagram is far too small for my eyesight. :-)
Jon G4FUT

269. Re: service depot for FT-290R mk2

Yahoo group: electrichandbag
Date: 2010-07-28 18:40:54 UTC
From: John
Topic: 266 Message: 269

Thanks for the suggestions Steve.
Sounds like that might be the problem. I decided to send it off to Geoff at Castle Electronics in the UK as several on this group have had success there. He seems friendly and thoughtful and I expect this to be a good experience. I'll report back here when I get the set back. At the least he can do diagnostics I couldn't do.

John
KC9OJV
>
> I had some receive problems with my ft290R that I traced to a couple of dry electros in the audio amplifier. I hadn't touched this radio for 10 years and was getting back into the hobby. When I started to have trouble on transmit as well it sounded like distortion on ssb and low diviation on FM. I bit the bullet and just replaced all electros on the main board. I yanked them out with a pair of pliers, desoldered the legs that were left dangling on the board, replaced them with new ones and cleaned up any gunge that spilt out of the old mangled electro. There wasn't much gunge as most had gone dry. Problem was solved. I only replaced the ones that were resonably accessible. Took 3 hours work and was mainly the 1uF and 10uF capacitors. The minature electros I sourced from Radio Spares (RS) but should be easily available elsewhere. Give it a go!
>
> Regards
>
> Steve
> VK2MD
>
>
>
> --- In electrichandbag@yahoogroups.com, "John" <greusel@> wrote:
> >
> > Short of someone saying changing the electrolytics will cure my over mod on SSB I'd like to find a place to service it-my FT-290mk2. Has anyone on this group had luck with Yaesu service or an independent? I don't have a problem shipping to Europe- the set is small enough and light enough that it make that plausible. The signal sounds almost robotic and over mod is the best way I can describe it. SSB and FM both work but SSB has terrible transmit audio.
> >
> > Thanks,
> >
> > John Greusel
> > KC9OJV
> >
>

270. Low Mic Gain on ssb

Yahoo group: electrichandbag
Date: 2010-08-11 13:05:43 UTC
From: Mansueto
Topic: 270 Message: 270

Hi all,
I have an FT290R which I use as an IF for my Microwave equipment and I keep getting told that although the modulation quality on SSB is good yet it is very low.
I tried to rectify the situation by following the alignment procedure as o page 43 section 6, but even with Mic level(VR2001), level is still very low and would have to literally speak lips to the Mic to have a descent level.

Any Ideas??

Thank you in advance
Mans. 9H1GB

271. Ft-290R Mk11

Yahoo group: electrichandbag
Date: 2010-09-03 10:47:07 UTC
From: John
Topic: 271 Message: 271

Well I got my mk11 back from service and it works much better. It was a bad ground on the PLL assembly. Now I'm sounding fairly good (according to a local 2 meter friend). However (on FM) he says it sounds like I'm about 5K off frequency on transmit. He said that when we were on the local repeater and also operating simplex (fm the whole time). I have two thoughts on this- either the radio got banged hard coming back and lost it's alignment or the electrolytics are still failing and now that the bad ground is repaired that's my only problem. On the Ft-290R there is a reference (on the net- mods)about tweeking the FM tx alignment slightly with a coil. Does anyone know where that would be on a Mk11? Also does anyone have a list of capacitor values and lead configurations for the Mk11?
Thanks again for your help,
John
KC9OJV

272. Re: Ft-290R Mk11

Yahoo group: electrichandbag
Date: 2010-09-04 20:24:43 UTC
From: g3vvt@aol.com
Topic: 271 Message: 272

Hi John,

The listing for the FT290RII microphone I have indicates the two versions are not compatible. The FT290R uses a 7 pin microphone, where the FT290RII shows an 8 pin version:

1. UP
2. B+
3. DWN
4. SPKR
5. N/C
6. PTT
7. GND
8. MIC

Regarding TX frequency error on FM, it will pay to get hold of a service monitor and check that all modes are where they should be before starting any re-alignment of the FM TX frequency. In the limited exposure I have had with the series the problem seems to be due to xtals ageing and the like affecting all modes. If all is fairly normal when checked with an accurate frequency meter and preferably measured via a high impedance probe to prevent circuit loading where possible, then consider aligning the FM MOD oscillator. With the FT290R the last one I handled off frequency believe the answer finally was adjustment of the PLL local frequency via L3007. This is shown in the handbook to set the reading at 145.000MHz set to FM (or believe 146.000MHz for the USA model). The measurement is at the cathode of D3002/3 and should be 135.190.0MHz according to the notes. An equivalent point on the FT290RII is PJ01 on the PLL unit 40xx which is the output to P3001 on the main unit 30xx. According to the listing on the FT290RII block diagram for fVCO this is apparently 131.115MHz which will be down to a different first IF frequency for the two versions.

If this is correct the FM TX MOD frequency of 13.9885MHz should be adjustable via T3013 which is in the base circuit of Q3026 and adjusts xtal X3001. Not worked on this with the FT290RII and the information is gathered from the limited service information I have for the model. The must be a service manual available somewhere, but have yet to find a copy.

Hope that helps, but again do ensure that the PLL local oscillator output is correct first.

Regards,
Bob, G3VVT

273. Strange fault on an FT-290mk1

Yahoo group: electrichandbag
Date: 2010-09-04 21:45:32 UTC
From: zaktherabbit
Topic: 273 Message: 273

Hi, I wonder if anyone has come across this before, and if so whether they cured it!

Ive suspected for some time my FT-290mk1 was off frequency on SSB, believing it to be by about 2kHz. Well, tonights contest gave me an opertunity to work several stations and ask for a frequency check

One station reported their dial as reading about 5kHz higher than mine, this was around 144.257. Another reported their dial as being 1.4kHz higher than mine, around .311. But then it got wierd!...

I was on (my dial indication) 144.309.7, and worked him 59. I then tuned down, and heard the same station at 144.305.3! just as strong. OK, so we think ive some non-linearity in the receive side, but! I called him on this frequency, and worked him again, at 59!

Now, i have NEVER seen that before! hearing the same station in two places yes, but being able to work him in both? whats going on there?

I would love to know if anyone has seen this before!

Martin G7MRV

274. Re: Strange fault on an FT-290mk1

Yahoo group: electrichandbag
Date: 2010-09-04 22:09:51 UTC
From: ZL1SWW
Topic: 273 Message: 274

Hi,

I think I would be looking at the PLL with a specan and seeing if you have got some nasty phase spurs happening. It could be that the PLL LPF caps have gone dry. You maybe seeing phase comparator noise / pulses coming through.

Phase noise issues will become really apparent with strong signals on RX and will show as beig seen in several places. With -50 to 60dBc/HZ noise, strong sigs will show up in other places.

Cheers,

Simon.

--- In electrichandbag@yahoogroups.com, "zaktherabbit" <barfield673@...> wrote:
>
> Hi, I wonder if anyone has come across this before, and if so whether they cured it!
>
> Ive suspected for some time my FT-290mk1 was off frequency on SSB, believing it to be by about 2kHz. Well, tonights contest gave me an opertunity to work several stations and ask for a frequency check
>
> One station reported their dial as reading about 5kHz higher than mine, this was around 144.257. Another reported their dial as being 1.4kHz higher than mine, around .311. But then it got wierd!...
>
> I was on (my dial indication) 144.309.7, and worked him 59. I then tuned down, and heard the same station at 144.305.3! just as strong. OK, so we think ive some non-linearity in the receive side, but! I called him on this frequency, and worked him again, at 59!
>
> Now, i have NEVER seen that before! hearing the same station in two places yes, but being able to work him in both? whats going on there?
>
> I would love to know if anyone has seen this before!
>
>
> Martin G7MRV
>

275. Re: [electrichandbag] Strange fault on an FT-290mk1

Yahoo group: electrichandbag
Date: 2010-09-04 22:54:20 UTC
From: Geoff Blake
Topic: 273 Message: 275

On 4 September 2010 22:45, zaktherabbit <barfield673@...> wrote:

> Hi, I wonder if anyone has come across this before, and if so whether they
> cured it!
>
> Ive suspected for some time my FT-290mk1 was off frequency on SSB,
> believing it to be by about 2kHz. Well, tonights contest gave me an
> opertunity to work several stations and ask for a frequency check
>
> One station reported their dial as reading about 5kHz higher than mine,
> this was around 144.257. Another reported their dial as being 1.4kHz higher
> than mine, around .311. But then it got wierd!...
>
> I was on (my dial indication) 144.309.7, and worked him 59. I then tuned
> down, and heard the same station at 144.305.3! just as strong. OK, so we
> think ive some non-linearity in the receive side, but! I called him on this
> frequency, and worked him again, at 59!
>
> Now, i have NEVER seen that before! hearing the same station in two places
> yes, but being able to work him in both? whats going on there?
>
> I would love to know if anyone has seen this before!
>
>
> Martin G7MRV
>
> -
>

Hi Martin, group,

First, lets deal with the off-frequency. The fairly basic xtal oscillators in the likes of the FT290 are not too wonderful in terms of frequency stability, an error +/-6kHz (40ppm) would not surprise me. More modern rigs, like the FT897D etc. use higher stability oscillators (better quality xtals, TCXO's etc.) Many (most) microwave operators are taking steps to control their frequencies to very tight limits, especially EME operators and JT users.

A easy way of checking the frequency accuracy of your radio is to listen to GB3VHF - I think it is receivable in your part of the world. The carrier frequency stability is extremely good, probably better than +/- 1Hz and this should be done regularly by all operators.

The second problem, the "two frequency" transmission/reception problem could be put down to some form of instability in the common IF parts of the FT290,

or to misalignment of the various xtal oscillators within the radio. I am afraid that I cannot be more specific as I do not have a FT290 to play with (all min X90's are MKII's.

If you have access to the necessary tools/equipment, it may be worth while going right through the re-alignment procedure, making notes of any off frequency steps, but !not! making any adjustments, at least, not until you have identified and solved any problems.

Good Luck, Geoff G8GNZ

276. Re: [electrichandbag] Strange fault on an FT-290mk1

Yahoo group: electrichandbag
Date: 2010-09-05 01:52:42 UTC
From: Bill Aycock
Topic: 273 Message: 276

Maybe he moved?
Bill--W4BSG

From: "zaktherabbit" <barfield673@...>
Sent: Saturday, September 04, 2010 4:45 PM
To: <electrichandbag@yahoogroups.com>
Subject: [electrichandbag] Strange fault on an FT-290mk1

> Hi, I wonder if anyone has come across this before, and if so whether they
> cured it!
>
> Ive suspected for some time my FT-290mk1 was off frequency on SSB,
> believing it to be by about 2kHz. Well, tonights contest gave me an
> opertunity to work several stations and ask for a frequency check
>
> One station reported their dial as reading about 5kHz higher than mine,
> this was around 144.257. Another reported their dial as being 1.4kHz
> higher than mine, around .311. But then it got wierd!...
>
> I was on (my dial indication) 144.309.7, and worked him 59. I then tuned
> down, and heard the same station at 144.305.3! just as strong. OK, so we
> think ive some non-linearity in the receive side, but! I called him on
> this frequency, and worked him again, at 59!
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> Now, i have NEVER seen that before! hearing the same station in two places
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> I would love to know if anyone has seen this before!
>
>
> Martin G7MRV
>
>
>
> ---
>
> Yahoo! Groups Links
>
>
>

277. Re: Strange fault on an FT-290mk1

Yahoo group: electrichandbag
Date: 2010-09-05 08:41:41 UTC
From: zaktherabbit
Topic: 273 Message: 277

Bill,

not unless every other station is also moving 4-5kHz to annoy me!

i rapidly switched between frequencies whilst he was CQing and he was just as loud on each during the same call!

Had the same with most stations, inc. a PA6 this morning!

--- In electrichandbag@yahoogroups.com, "Bill Aycock" <baycock2@...> wrote:
>
> Maybe he moved?
> Bill--W4BSG
> ----------
> From: "zaktherabbit" <barfield673@...>
> Sent: Saturday, September 04, 2010 4:45 PM
> To: <electrichandbag@yahoogroups.com>
> Subject: [electrichandbag] Strange fault on an FT-290mk1
>
> > Hi, I wonder if anyone has come across this before, and if so whether they
> > cured it!
> >
> > Ive suspected for some time my FT-290mk1 was off frequency on SSB,
> > believing it to be by about 2kHz. Well, tonights contest gave me an
> > opertunity to work several stations and ask for a frequency check
> >
> > One station reported their dial as reading about 5kHz higher than mine,
> > this was around 144.257. Another reported their dial as being 1.4kHz
> > higher than mine, around .311. But then it got wierd!...
> >
> > I was on (my dial indication) 144.309.7, and worked him 59. I then tuned
> > down, and heard the same station at 144.305.3! just as strong. OK, so we
> > think ive some non-linearity in the receive side, but! I called him on
> > this frequency, and worked him again, at 59!
> >
> > Now, i have NEVER seen that before! hearing the same station in two places
> > yes, but being able to work him in both? whats going on there?
> >
> > I would love to know if anyone has seen this before!
> >
> >
> > Martin G7MRV
> >
> >
> >
> > ------------------------------------

> >
> > Yahoo! Groups Links
> >
> >
> >
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278. Re: Strange fault on an FT-290mk1

Yahoo group: electrichandbag
Date: 2010-09-05 11:58:45 UTC
From: g3vvt@aol.com
Topic: 273 Message: 278

Hi Martin,

Perhaps is more common than realized with a number of versions of what is 144.300MHz at one time!

You need accurate test equipment to resolve the problem. Follow the FT290R handbook information on checking the PLL LO output frequency as this being out will affect both TX and RX frequencies. If this is off frequency as a starter check the xtal frequencies in the PLL section are correct according to their marked frequencies using a high impedance probe so as not to load the oscillator. If these is OK a limited adjustment of L3007 in the FM mode can bring the radio back on frequency as the error affects all modes. Quite often the error will be in the order of 2kHz, though this is not to say that there will still be a disparity with other radios. A test with later models such as the FT857, etc, that use better stability synthesizer systems as mentioned in another posting can be more informative. Had a similar problem with my FT480R which turned out to be ageing of the xtals in the end, though with that the error was not as great.

Regards,
Bob, G3VVT

279. Re: Strange fault on an FT-290mk1

Yahoo group: electrichandbag
Date: 2010-09-07 21:14:51 UTC
From: zaktherabbit
Topic: 273 Message: 279

well, it is indeed a problem in the PLL!

every time the set makes a transition over 10kHz (ie from 144.299 to 144.300) there is a jump in frequency back by nearly 6KHz!

It does this on Tx as well, hence my being able to work a station on both frequencies i was receiving them on. The 6kHz change then spreads across the 10kHz, so its on the correct frequency (ie dial and actual F match) at the 100kHz, only to jump again on going another k!

So, i just need now to discover whats faulty in the PLL and hopefully fix it! It looks like a data error. Unfortunately, it looks like this set uses serial data lines!

Martin

--- In electrichandbag@yahoogroups.com, g3vvt@... wrote:
>
> Hi Martin,
>
> Perhaps is more common than realized with a number of versions of what is
> 144.300MHz at one time!
>
> You need accurate test equipment to resolve the problem. Follow the FT290R
> handbook information on checking the PLL LO output frequency as this being
> out will affect both TX and RX frequencies. If this is off frequency as a
> starter check the xtal frequencies in the PLL section are correct according
> to their marked frequencies using a high impedance probe so as not to load
> the oscillator. If these is OK a limited adjustment of L3007 in the FM mode
> can bring the radio back on frequency as the error affects all modes.
> Quite often the error will be in the order of 2kHz, though this is not to say
> that there will still be a disparity with other radios. A test with later
> models such as the FT857, etc, that use better stability synthesizer systems
> as mentioned in another posting can be more informative. Had a similar
> problem with my FT480R which turned out to be ageing of the xtals in the end,
> though with that the error was not as great.
>
> Regards,
> Bob, G3VVT
>

280. Re: [electrichandbag] Re: Strange fault on an FT-290mk1

Yahoo group: electrichandbag
Date: 2010-09-08 19:03:19 UTC
From: Geoff Blake
Topic: 273 Message: 280

Hi Martin,

Some VHF radios use a 10kHz step synthesizer, and smaller frequency increments are generated by tuning the "upconverter xtal" with a varicap diode which pulls it in 100Hz or 1kHz steps. I believe this is well documented in the manual, but I cannot access the .pdf's at the moment.

73 Geoff

On 7 September 2010 22:14, zaktherabbit <barfield673@...> wrote:

> well, it is indeed a problem in the PLL!
>
>
> every time the set makes a transition over 10kHz (ie from 144.299 to
> 144.300) there is a jump in frequency back by nearly 6KHz!
>
> It does this on Tx as well, hence my being able to work a station on both
> frequencies i was receiving them on. The 6kHz change then spreads across the
> 10kHz, so its on the correct frequency (ie dial and actual F match) at the
> 100kHz, only to jump again on going another k!
>
> So, i just need now to discover whats faulty in the PLL and hopefully fix
> it! It looks like a data error. Unfortunately, it looks like this set uses
> serial data lines!
>
>
> Martin
>
> --- In electrichandbag@yahoogroups.com, g3vvt@... wrote:
> >
> > Hi Martin,
> >
> > Perhaps is more common than realized with a number of versions of what
> is
> > 144.300MHz at one time!
> >
> > You need accurate test equipment to resolve the problem. Follow the
> FT290R
> > handbook information on checking the PLL LO output frequency as this
> being
> > out will affect both TX and RX frequencies. If this is off frequency as
> a
> > starter check the xtal frequencies in the PLL section are correct
> according
> > to their marked frequencies using a high impedance probe so as not to

> load
> > the oscillator. If these is OK a limited adjustment of L3007 in the FM
> mode
> > can bring the radio back on frequency as the error affects all modes.
> > Quite often the error will be in the order of 2kHz, though this is not
> to say
> > that there will still be a disparity with other radios. A test with
> later
> > models such as the FT857, etc, that use better stability synthesizer
> systems
> > as mentioned in another posting can be more informative. Had a similar
> > problem with my FT480R which turned out to be ageing of the xtals in the
> end,
> > though with that the error was not as great.
> >
> > Regards,
> > Bob, G3VVT
> >
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> ------------------------------------
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> Yahoo! Groups Links
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281. Wanted - dead FT290mk1!

Yahoo group: electrichandbag
Date: 2010-09-10 04:46:50 UTC
From: zaktherabbit
Topic: 281 Message: 281

Hi chaps,

i know this is a real longshot, but if anyone has a dead (oreven semialive!) mk1 FT-290 they would care to donate, i am looking for one to allow me to completely strip it.

The purpose of this would be to create a series of high resolution photos of every section of the radio, create a guide to the connections of the wiring loom, and to produce a large scale parts placement diagram of the board (something which seems impossible to find), noting in particular the various parts that are either under-board mounted or in-line with the wiring loom!

Naturally, carrying this out is likely to kill a working radio (especially creating the placement diagram which will involve depopulating the board!)

So if anyone has a dead set they would like to donate to medical science, please let me know!

Martin G7MRV

282. Re: Strange fault on an FT-290mk1

Yahoo group: electrichandbag
Date: 2010-09-23 19:24:35 UTC
From: zaktherabbit
Topic: 273 Message: 282

well, problem solved!

turned out it was just badly out of alignment. Ran through the full PLL alignment procedure and alls well

Martin G7MRV

283. ft 290 Mk1 which part or pats are now obsolete

Yahoo group: electrichandbag
Date: 2010-09-28 10:59:33 UTC
From: cd40105
Topic: 283 Message: 283

Hi, hope this isn't a case of too many cooks, I've been told in the MK1. ft 290 theres an obsolete part..I don't know what it is or what is does. Can anybody provide me with any answers please.

thank you ian g3yrq.

284. Re: ft 290 Mk1 which part or pats are now obsolete

Yahoo group: electrichandbag
Date: 2010-09-28 13:34:34 UTC
From: zaktherabbit
Topic: 283 Message: 284

Hi Ian,

Its quite possible many parts are now obsolete in the mk1. Although many will have equivalents, without checking i would say the microprocessor and the LCD driver almost certainly, as these are custom devices.

Martin G7MRV

--- In electrichandbag@yahoogroups.com, "cd40105" <cd40105@...> wrote:
>
> Hi, hope this isn't a case of too many cooks, I've been told in the MK1. ft 290 theres an obsolete part..I don't know what it is or what is does. Can anybody provide me with any answers please.
>
> thank you ian g3yrq.
>

285. Looking for an FT-290MKII

Yahoo group: electrichandbag
Date: 2010-11-02 02:01:32 UTC
From: va2dv
Topic: 285 Message: 285

I am currently looking for a clean FT-290MK2.
Accessories a plus but not a deal breaker.
Let me know what you have !
Thanks for looking !
Please contact me directly at :
Dave.allard@...

286. What is the screw thread form on the mk1 290?

Yahoo group: electrichandbag
Date: 2010-11-04 20:52:12 UTC
From: rpcrichton
Topic: 286 Message: 286

Hi group , I would like to homebrew a 1/4 wave out of ultra malleable copper I note that in the times of production there was a 1/4 wave produced to replace the telescopic and also a rubber duck can anyone tell me what the description of the thread is ? I would like an original but they seem to be few and far between.

I have one of each of both series of x-90 rigs , it would have been nice to have a 4m variant also.

best 73 Paul M1BPT

287. Looking for a FT-290, 690, 790 or mk2 case

Yahoo group: electrichandbag
Date: 2010-11-14 00:16:52 UTC
From: kf7bsf
Topic: 287 Message: 287

I'm looking to buy a case from any of the FT-X90 series. Prefer a mk2 case, but I should be able to work with a mk1.

I'm building a project to go with my 3 mk2s, so the matching case would be a great start.

I also have a 790mk2 that needs adjustments and or caps replaced, so I would consider buying another 790mk2, then just part out the current radio.

73 de Gene/KF7BSF

288. Looking an FT-790 mk2 Technical Manual

Yahoo group: electrichandbag
Date: 2010-11-14 00:39:27 UTC
From: kf7bsf
Topic: 288 Message: 288

Greetings All,

I'm still trying to locate a tech supplement for the 790 mk2. I have the supplement for a 290 mk2 but the difference are substantial. I am willing to buy a manual, pay for scans (high quality) or whatever. My searches have turned up lots of mk1 stuff, but that's it.

73 de Gene/KF7BSF

289. Conversion of a 290 to a 690

Yahoo group: electrichandbag
Date: 2010-11-15 12:44:42 UTC
From: J
Topic: 289 Message: 289

Hi
Anyone out there know if its possible/feasable to convert a 290 to a 690, as having looked at the block diagrams and schematics for both rigs it looks possible, I'm asking as I recently bid for a 690 on E-bay but it went for far more than I thought worth it (almost £200), so has anyone done this or have any thoughts about it let me know
Jim G1ASN

290. 290 to 690

Yahoo group: electrichandbag
Date: 2010-11-16 12:59:25 UTC
From: geoffrey pike
Topic: 290 Message: 290

Hi
You could do what i did and fit a Meon transverter into the 290 battery box, probably alot easier than messing about with the synthesizer,
Geoff

291. Re: Conversion of a 290 to a 690

Yahoo group: electrichandbag
Date: 2010-11-17 16:21:18 UTC
From: g3vvt
Topic: 289 Message: 291

Hi Jim,

As Geoff notes adding a transverter could be the easiest option (unless you have unlimited time and resources to hand!).

Hence the price differential for the rarer FT-690 compared to the FT-290.

At a guess you would have to replace all the tuned circuits on the RX front end, redesign the complete TX strip from the mixer onwards and re-arrange the synthesiser to provide the injection oscillator frequencies required. If to be used for 6m FM would also require to have 12.5kHz channel steps available also.

Not sure the Meon as it was originally available would cope with 2m input as believe was nominally designed for HF input of 28-30MHz similar to the Cirkit offering of that era. Additionally only gave an output of 0.5W and needed a PA to boost the output. That is even if you could even source the PCB as this has been out of production for a while unless somebody such as Spectrum have re-introduced it to the market as a PW PCB?

Spectrum have a 2m to 6m transvertor as a kit or ready built, but is rather larger needing to be used as an external unit. They are now available as a single IF version that will take a higher level of drive such as the output of the FT-290.

Regards,
Bob, G3VVT

292. 290R fault

Yahoo group: electrichandbag
Date: 2010-11-19 01:14:08 UTC
From: hennessyben@ymail.com
Topic: 292 Message: 292

Has any one i fault in their 290 when the meter goes FSD on RX and has no output power on TX.

Thanks

Ben

VK5TX

293. Re: [electrichandbag] 290R fault

Yahoo group: electrichandbag
Date: 2010-11-20 16:05:32 UTC
From: Neil Horne
Topic: 292 Message: 293

Hi Ben,

I had a similar problem with my FT290. I followed the CPU reset sequence in the manual, which up to press has resolved the situation. Been OK now for over 6 months.

regards

Neil G4TCZ

--- On Fri, 19/11/10, hennessyben@... <hennessyben@...> wrote:

From: hennessyben@... <hennessyben@...>
Subject: [electrichandbag] 290R fault
To: electrichandbag@yahoogroups.com
Date: Friday, 19 November, 2010, 1:14

Has any one i fault in their 290 when the meter goes FSD on RX and has no output power on TX.

Thanks

Ben

VK5TX

Yahoo! Groups Links

294. Re: [electrichandbag] 290R fault

Yahoo group: electrichandbag
Date: 2010-11-20 21:16:21 UTC
From: Mansueto Grech
Topic: 292 Message: 294

Hi Ben,
Yes almost all ft290r at some point suffer from this problem. In my case the problem was the AGC/ALC circuitry. I had to change a couple of these bad electrolytic capacitors.
BY THE WAY if you leave the set on for say half and hour the full faction is restored.
Ben hope I was of some assistance and id you require further assistance please do not hesitate to ask
Good Luck
Mans. 9H1GB

On 19 November 2010 02:14, hennessyben@... <hennessyben@...>wrote:

>
>
> Has any one i fault in their 290 when the meter goes FSD on RX and has no
> output power on TX.
>
> Thanks
>
> Ben
>
> VK5TX
>
>
>

295. subtone

Yahoo group: electrichandbag
Date: 2010-11-26 14:31:57 UTC
From: ndrngl2004
Topic: 295 Message: 295

hi,
I need to use a subtone .
It's ok if I inject it in the mike socket? may be it will be attenuated by the filter?

I know its better inside but I have also an ft 790 and build one subtone board it's better than two...

ciao de IZ0TUT Angelo

ps :Sorry for my english!

296. Re: [electrichandbag] subtone

Yahoo group: electrichandbag
Date: 2010-11-27 09:27:47 UTC
From: Gordon JC Pearce
Topic: 295 Message: 296

On Fri, 2010-11-26 at 14:31 +0000, ndrngl2004 wrote:
> hi,
> I need to use a subtone .
> It's ok if I inject it in the mike socket? may be it will be attenuated by the filter?
>
> I know its better inside but I have also an ft 790 and build one subtone board it's better than two...

The filter for the mike has a highpass filter with a cutoff of about 300Hz. So, the CTCSS tone will be filtered out by that.

Gordon MM0YEQ

297. Re: subtone

Yahoo group: electrichandbag
Date: 2010-11-27 14:17:00 UTC
From: g3vvt@aol.com
Topic: 295 Message: 297

Hi Angelo,

Within reservations it is possible to inject the CTCSS tone via a suitable coupling capacitor and series resistor at the microphone socket on pin 2 on the mk 1.

I have done it with an FT-790R mk1 as a necessity for a local amateur when we shifted our local UHF repeater GB3LF to CTCSS only operation. The CTCSS encoder was built in a small external metal box with a 7 pin microphone connector on the front and a short lead to go into the transceiver microphone connector. External 12V can fed into the unit for powering the CTCSS encoder or a feed taken from pin 4 which has 5V available as long as the current drain of the encoder is low. From memory a miniature toggle switch was placed on the front of the metal box to enable the unit to be switched off for normal simplex use. As the CTCSS level needed was greater than about 100Hz deviation even with the 300Hz high pass filter noted by Gordon it will still work. I use a CTCSS level of 250Hz deviation on all my radios and this level is fairly easy to achieve. Did note however the was a downside with this method in that the CTCSS level was influenced by speech deviation level. An FT-290 mk2 similarly modified was less susceptible to this problem.

It does work is the bottom line.

A better method would be to provide a new connection from the microphone socket to a point after the deviation control such as the wiper connection though I do note looking at the circuit diagram that there is a point marked T SQ just before the low pass filter that feeds the deviation control. With the mk 1 all the 7 pins on the microphone connector are used. The Sp connection on pin 5 could be discarded if not used and the direct connection made there or even an 8 pin microphone connecter installed to provide the spare pin. The choice is yours. I decided to keep it simple and leave the radio unmodified in both applications of the encoder.

Regards,
Bob, G3VVT

298. Re: subtone

Yahoo group: electrichandbag
Date: 2010-11-27 14:21:24 UTC
From: gi0gdp
Topic: 295 Message: 298

--- In electrichandbag@yahoogroups.com, "ndrngl2004" <angeloandreoletti@...> wrote:
>
> hi,
> I need to use a subtone .
> It's ok if I inject it in the mike socket? may be it will be attenuated by the filter?
>
> I know its better inside but I have also an ft 790 and build one subtone board it's better than two...
>
> ciao de IZ0TUT Angelo
>
> ps :Sorry for my english!
>

Angelo,
I run CTCSS on my 290R MK1, you can inject the tone into Q2004, uPC577H
This is the mic amp, i inject at the TSQ test point, it has a green wire connecting to the test point post.
You will see this on the circuit diagrsm. To locate it remove the top cover and it is to the right of the ssb xtal filter and half way from the front.
Geoff

299. Re: 290R fault

Yahoo group: electrichandbag
Date: 2010-11-27 22:55:34 UTC
From: ZL1SWW
Topic: 292 Message: 299

Hi Mans,

Interested that you managed to fix yours.. I have been plagued by the ALC problem and changed out two caps in the ALC circuit with not much success. I think it has improve dteh issue from taking 30mins or so to come right, it is now down to about 5 or so mins.

Do you recollect which ones you changed? I thnk I did C92 C87 and maybe C86 as well but memory fading a bit o that one.

Cheers & thanks,

Simon
ZL1SWW

--- In electrichandbag@yahoogroups.com, Mansueto Grech <mansueto.grech@...> wrote:
>
> Hi Ben,
> Yes almost all ft290r at some point suffer from this problem. In my case the
> problem was the AGC/ALC circuitry. I had to change a couple of these bad
> electrolytic capacitors.
> BY THE WAY if you leave the set on for say half and hour the full faction is
> restored.
> Ben hope I was of some assistance and id you require further assistance
> please do not hesitate to ask
> Good Luck
> Mans. 9H1GB
>
> On 19 November 2010 02:14, hennessyben@... <hennessyben@...>wrote:
>
> > >
> > >
> > > Has any one i fault in their 290 when the meter goes FSD on RX and has no
> > > output power on TX.
> > >
> > > Thanks
> > >
> > > Ben
> > >
> > > VK5TX
> > >
> > >
> > >
>

300. Re: [electrichandbag] Re: 290R fault

Yahoo group: electrichandbag
Date: 2010-11-28 11:20:07 UTC
From: Mansueto Grech
Topic: 292 Message: 300

Hi Simon,
Yes, I do recollect changing All 3 Capacitors.
Mine does the same that IE everything returns to normal after around 5 minutes from switch on. Have noticed that if I switch on the rig say a hour a day the time is very much reduced. Also during the summer months the rig comes on to normal almost on switch on.
One point to notice is that probable those electrolytic capacitors in question, probably leaked dielectric in to the crappy type of PCB Yaesu used (pressed cardboard like) and that could also cause the problem. I have also a similar problem with a Kenwood TR9130 but as I was saying 5 Minutes is not such a long time to wait.
Good luck and I'll keep you posted, and please do the same
73's
& good luck
Mans. 9H1GB

On 27 November 2010 23:55, ZL1SWW <hanzinzl@...> wrote:

>
>
> Hi Mans,
>
> Interested that you managed to fix yours.. I have been plagued by the ALC
> problem and changed out two caps in the ALC circuit with not much success. I
> think it has improve dteh issue from taking 30mins or so to come right, it
> is now down to about 5 or so mins.
>
> Do you recollect which ones you changed? I thnk I did C92 C87 and maybe C86
> as well but memory fading a bit o that one.
>
> Cheers & thanks,
>
> Simon
> ZL1SWW
>
>
> --- In electrichandbag@yahoogroups.com <electrichandbag%40yahoogroups.com>,
> Mansueto Grech <mansueto.grech@...> wrote:
> >
> > Hi Ben,
> > Yes almost all ft290r at some point suffer from this problem. In my case
> the
> > problem was the AGC/ALC circuitry. I had to change a couple of these bad
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> > BY THE WAY if you leave the set on for say half and hour the full faction

> is
> > restored.
> > Ben hope I was of some assistance and id you require further assistance
> > please do not hesitate to ask
> > Good Luck
> > Mans. 9H1GB
> >
> > On 19 November 2010 02:14, hennessyben@... <hennessyben@...>wrote:
>
> >
> > > >
> > > > Has any one i fault in their 290 when the meter goes FSD on RX and has
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> > > output power on TX.
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> > > > Thanks
> > > >
> > > > Ben
> > > >
> > > > VK5TX
> > > >
> > > >
> > > >
> > >
>
>
>

301. Re: 290R fault

Yahoo group: electrichandbag
Date: 2010-11-28 16:39:22 UTC
From: g3vvt@aol.com
Topic: 292 Message: 301

Hi Mans,

First have you tried the modification discussed by Harry. G3LLL in his column of Practical Wireless of August 2007? This subject has been discussed here before a year or two back, so the thread should still be there. His modification was to add a 47k resistor between Q1014 base to emitter. Was also thought at the time that diodes D28, 29 and 30 may be involved in the matter. Additionally the rubber glue employed by Yaesu in vibration sensitive areas can go conductive with age and so can be suspect. Often quite difficult to remove.

There has been intermittent discussion regarding problems due to effects caused by deteriorating electrolytic capacitors in the FT290R mk1 and other band variants also being the cause, but until now nobody has had the knowledge or courage to name them, Simon, ZL1SWW is the first I have seen. C86 and C92 are very much possibilities in the cure. However, C87 being a 33pF ceramic or similar coupling capacitor is not as likely, though still could be in there with a chance. Who knows!

Whilst I was trawling my poor copy of the FT-290R mk1 service manual to look at the chopped up circuit diagram (which was rather time consuming), noted down all the electrolytic capacitors that could be any way possible in causing problem whether by leakage causing a conductive path internally between the layers or on the surface of the paper based PCB or a lack off decoupling by the capacitor drying up. The list is longer than you suspect and some could be dismissed as unlikely, but to be complete this is the list I found and even there some may have been missed!

C03, 04, 05, 06,10,11, 17, 19, 20, 27, 33, 45, 54, 55, 62, 65, 67, 86, 92, 94, 104, 109, 112, 123, 126, 128, 129, 131 and 137. C136 (1000uF) is less likely unless any leakage has gone somewhere it should have not. Thirty capacitor in all is the tally so far.

Quite a long list and may as mentioned have missed a few of the capacitors that are polarity marked on the diagram and have values to be expected. A lot are 10uF which may help if you are buying in bulk to do an "umbrella job". However, still would cost a substantial amount to do in full. For the lower values I would prefer to use tantalum capacitors were it not for the cost. Have only come across one faulty tantalum that went S/C in a logic system, but was harder to trace as was one of nine on a common supply rail.

Certainly you would need to use a vacuum desoldering station with a fine nozzle on the tool to do the work as one may cause faults that were not there to start with! The price of these has come down in the UK in recent years with CPC offering a cheaper desoldering station, Duratool ZD-915 at £65 + VAT. I have the Hakko 808 handheld device bought in the USA in earlier

years for substantially more.

Would appreciate somebody who has done the cure on the FT-290R mk1 breaking down my list to remove none starters.

Is an ongoing problem and seems to be getting more frequent reading the mail. Also is difficult to pin down as the radio starts working normally after a period of usage and may not immediately go faulty again afterwards.

Regards,
Bob, G3VVT

302. Re: [electrichandbag] Re: 290R fault

Yahoo group: electrichandbag
Date: 2010-11-28 18:44:48 UTC
From: Mansueto Grech
Topic: 292 Message: 302

Hi Bod,
Thanks for the reply. All noted and yes I did try the mod as suggested by Harry. I remember clearly the article but for me that did not work. One of these day I borrow my friend Capacitor Wizard (as many of you might know this fantastic rather expensive ESR tester) and check all electrolytic. Although I am of the opinion that in my case the fault ties in the type of PCB used (rather Crappy I should add). this opinion is based on the fact that when I lightly freeze or heat the PCB from the solder side the fault manifests itself.

I frequently use the Rig as an IF for my 10Ghz portable equipment though I did now get an FT817NR as a possible backup.
Anyway Once again thanks for your thought and hint I am sure many of use found them interesting and food for thought. I sure Have.
73's
Mans. 9H1GB

PS Anyone happen to have a, maybe colour copy of the PCB LAYOUT as I believe a service manual for this rig was never available.
thanks in advance

On 28 November 2010 17:39, <g3vvt@...> wrote:

>
>
> Hi Mans,
>
> First have you tried the modification discussed by Harry. G3LLL in his
> column of Practical Wireless of August 2007? This subject has been discussed
> here before a year or two back, so the thread should still be there. His
> modification was to add a 47k resistor between Q1014 base to emitter. Was
> also thought at the time that diodes D28, 29 and 30 may be involved in the
> matter. Additionally the rubber glue employed by Yaesu in vibration
> sensitive areas can go conductive with age and so can be suspect. Often
> quite difficult to remove.
>
> There has been intermittent discussion regarding problems due to effects
> caused by deteriorating electrolytic capacitors in the FT290R mk1 and other
> band variants also being the cause, but until now nobody has had the
> knowledge or courage to name them, Simon, ZL1SWW is the first I have seen.
> C86 and C92 are very much possibilities in the cure. However, C87 being a
> 33pF ceramic or similar coupling capacitor is not as likely, though still
> could be in there with a chance. Who knows!
>
> Whilst I was trawling my poor copy of the FT-290R mk1 service manual to
> look at the chopped up circuit diagram (which was rather time consuming),

> noted down all the electrolytic capacitors that could be any way possible in
> causing problem whether by leakage causing a conductive path internally
> between the layers or on the surface of the paper based PCB or a lack off
> decoupling by the capacitor drying up. The list is longer than you suspect
> and some could be dismissed as unlikely, but to be complete this is the list
> I found and even there some may have been missed!
>
> C03, 04, 05, 06,10,11, 17, 19, 20, 27, 33, 45, 54, 55, 62, 65, 67, 86, 92,
> 94, 104, 109, 112, 123, 126, 128, 129, 131 and 137. C136 (1000uF) is less
> likely unless any leakage has gone somewhere it should have not. Thirty
> capacitor in all is the tally so far.
>
> Quite a long list and may as mentioned have missed a few of the capacitors
> that are polarity marked on the diagram and have values to be expected. A
> lot are 10uF which may help if you are buying in bulk to do an "umbrella
> job". However, still would cost a substantial amount to do in full. For the
> lower values I would prefer to use tantalum capacitors were it not for the
> cost. Have only come across one faulty tantalum that went S/C in a logic
> system, but was harder to trace as was one of nine on a common supply rail.
>
> Certainly you would need to use a vacuum desoldering station with a fine
> nozzle on the tool to do the work as one may cause faults that were not
> there to start with! The price of these has come down in the UK in recent
> years with CPC offering a cheaper desoldering station, Duratool ZD-915 at
> £65 + VAT. I have the Hakko 808 handheld device bought in the USA in earlier
> years for substantially more.
>
> Would appreciate somebody who has done the cure on the FT-290R mk1 breaking
> down my list to remove none starters.
>
> Is an ongoing problem and seems to be getting more frequent reading the
> mail. Also is difficult to pin down as the radio starts working normally
> after a period of usage and may not immediately go faulty again afterwards.
>
> Regards,
> Bob, G3VVT
>
>

303. Re: 290R fault

Yahoo group: electrichandbag
Date: 2010-11-29 10:31:21 UTC
From: g3vvt@aol.com
Topic: 292 Message: 303

Hi All,

Found another 10 electrolytic capacitors that may warrant investigation though most possibly unconnected with the FT-290R fault. These are: C21, 22, 23, 26, 42, 48, 96, 110, 111 and 134.

Which brings the total tally up to 40 electrolytic capacitors. For completeness will give the list again.

C03, 04, 05, 06,10,11, 17, 19, 20, 21, 22, 23, 26, 27, 33, 42, 45, 48, 54, 55, 62, 65, 67, 86, 92, 94, 96, 104, 109, 110, 111, 112, 123, 126, 128, 129, 131, 134 and 137. C136 (1000uF) is less likely unless any leakage has gone somewhere it should have not.

A careful study of those that can be excluded would help and must be the majority of the list.

Regards,
Bob, G3VVT

304. Re: 290R fault

Yahoo group: electrichandbag
Date: 2010-11-29 13:28:58 UTC
From: g3vvt@aol.com
Topic: 292 Message: 304

In a message dated Sun Nov 28, 2010 10:44 am ((PST)) "Mansueto Grech" mansueto.grech@... mans_9h1gb writes:

Although I am of the opinion that in my case the fault ties in the type of PCB used (rather Crappy I should add). this opinion is based on the fact that when I lightly freeze or heat the PCB from the solder side the fault manifests itself.

Hi Mans,

This was the type of PCB used in that era made from paper laminate, the fibreglass type was still fairly rare from apart from mainly high end test equipment up to then. When I started work in radio and TV servicing in the late 1950s all the devices we saw were using point to point wiring with the first PCB appearing a number of years later in the 1960s. These were paper laminate types and suffered from scorching due to local heat from components plus tracking between the layers of the PCB where high voltages were present. Could lead you on a "wild goose chase" until it was found out what the problem was. For the low voltages seen in transistorised amateur radios the paper laminated PCB were acceptable and probably a lot cheaper to produce.

Would be interested if you can localise exactly where freezing and heat have an effect on the problem as this may assist in finding a cure.

Other potential problems are where through rivets, etc have been used to provide ground connections from one side of the board to the other. Sometimes the ground connections go through a link via metal support structures and fractures of the print in these locations is not unknown. The the through rivet problem was common with the IC-240 2m transceiver and needed approximately 22 rivets removing to be replaced with short lengths of tinned copper wire to affect a permanent cure. Suspect it may have affected early Icom HF transceivers that used similar techniques on the PCB.

During studying of the FT-290R mk1 circuit diagram have noted the location of the 3V back up battery which was a question made a while back. For future reference it is on the Regulator PCB No.4xxx. This is a vertical PCB second from the front panel. How you extract it may be another problem!

Have not seen a service manual for the FT290R mk1, but the one for the FT290 mk2 is definitely available.

Regards,
Bob, G3VVT

305. Re: subtone on a faulty ft 790!!!

Yahoo group: electrichandbag
Date: 2010-11-29 14:40:47 UTC
From: ndrngl2004
Topic: 295 Message: 305

tank's for your answer also to Gordon and Bob.

I will try with an internal circuit made with a 555 with a sub tone for the repeaters of rome and a switch for the sky (I want to try satellite!) This is a simpler e cheaper solution better than a dedicated chip. But I 'll try also the external (i like to experiment :-))

Ill try and tell you the story but after I resolve a little problem:
yesterday, while the 790 was receiving the smeter go full scale, the display dimmed off and the silence come in the speaker and in my heart!

I go to my chip-pusher and come with a bag of capacitor.

The surgery will become tomorrow at 19:00 zulu.
Think to me!

ciao de iz0tut Angelo

--- In electrichandbag@yahoogroups.com, "gi0gdp" <gi0gdp@...> wrote:
>
>
>
> --- In electrichandbag@yahoogroups.com, "ndrngl2004" <angeloandreoletti@> wrote:
> >
> > hi,
> > I need to use a subtone .
> > It's ok if I inject it in the mike socket? may be it will be attenuated by the filter?
> >
> > I know its better inside but I have also an ft 790 and build one subtone board it's better than two...
> >
> > ciao de IZ0TUT Angelo
> >
> > ps :Sorry for my english!
> >
>
> Angelo,
> I run CTCSS on my 290R MK1, you can inject the tone into Q2004, uPC577H
> This is the mic amp, i inject at the TSQ test point, it has a green wire connecting to the test point post.
> You will see this on the circuit diagrsm. To locate it remove the top cover and it is to the right of the ssb xtal filter and half way from the front.
> Geoff
>

306. Re: 290R fault

Yahoo group: electrichandbag
Date: 2010-11-29 23:27:47 UTC
From: vk2md
Topic: 292 Message: 306

In my revamp of my ft290R mk1 (owned from new) I bit the bullet and just replaced all the electrolytic capacitors on the main board that were easily accessible. The radio hadn't been used for 10 years BTW. I used a brutal approach in just yanking them out with pliers and then desoldering the pins that were left behind. I was worried about damaging the pc board by using a solder wick. Half the caps oozed goo and half didn't after this brutal extraction method, so i guess some were dry after 25 years.

This resolved a whole pile of problems from no Audio and low deviation on tx.

If you have a few hours to spare and have multiple issues then you may want to try this approach.

I replaced the backup battery as well. I couldn't get a directly replacable unit, but managed to find a similar battery that had solder tags welded on it and managed to "get it to fit"!

Steve
vk2md.

--- In electrichandbag@yahoogroups.com, g3vvt@... wrote:
>
>
> In a message dated Sun Nov 28, 2010 10:44 am ((PST)) "Mansueto Grech"
> mansueto.grech@... mans_9h1gb writes:
>
> Although I am of the opinion that in my case the fault ties in the type of
> PCB used (rather Crappy I should add). this opinion is based on the fact
> that when I lightly freeze or heat the PCB from the solder side the fault
> manifests itself.
>
>
>
>
>
>
>
> Hi Mans,
>
> This was the type of PCB used in that era made from paper laminate, the
> fibreglass type was still fairly rare from apart from mainly high end test
> equipment up to then. When I started work in radio and TV servicing in the
> late 1950s all the devices we saw were using point to point wiring with the
> first PCB appearing a number of years later in the 1960s. These were paper
> laminate types and suffered from scorching due to local heat from components
> plus tracking between the layers of the PCB where high voltages were
> present. Could lead you on a "wild goose chase" until it was found out what the
> problem was. For the low voltages seen in transistorised amateur radios the

> paper laminated PCB were acceptable and probably a lot cheaper to produce.
>
> Would be interested if you can localise exactly where freezing and heat
> have an effect on the problem as this may assist in finding a cure.
>
> Other potential problems are where through rivets, etc have been used to
> provide ground connections from one side of the board to the other.
> Sometimes the ground connections go through a link via metal support structures and
> fractures of the print in these locations is not unknown. The the through
> rivet problem was common with the IC-240 2m transceiver and needed
> approximately 22 rivets removing to be replaced with short lengths of tinned copper
> wire to affect a permanent cure. Suspect it may have affected early Icom
> HF transceivers that used similar techniques on the PCB.
>
> During studying of the FT-290R mk1 circuit diagram have noted the location
> of the 3V back up battery which was a question made a while back. For
> future reference it is on the Regulator PCB No.4xxx. This is a vertical PCB
> second from the front panel. How you extract it may be another problem!
>
> Have not seen a service manual for the FT290R mk1, but the one for the
> FT290 mk2 is definitely available.
>
> Regards,
> Bob, G3VVT
>

307. Mutek front end and antenna configuration

Yahoo group: electrichandbag
Date: 2010-12-05 17:35:56 UTC
From: mickhannam
Topic: 307 Message: 307

Has anyone noticed that with the Mutek front end fitted the Rx performance on an external antenna is affected by the position of telescopic antenna.

With the antenna retracted Rx is weak, extend it and then shorten so it is out of its holder but not fully extended and it is OK.

Not sure if this is a problem with the telescopic touching the screened holder when it is retracted or if it is a capacitive effect when it is retracted in its holder.

Performance with the telescopic seems fine.

Any thoughts, or anyone seen the same thing?

Mick

308. Re: Mutek front end and antenna configuration

Yahoo group: electrichandbag
Date: 2010-12-05 17:47:35 UTC
From: mickhannam
Topic: 307 Message: 308

Sorry, forgot that the telescopic shorts whenit is retracted.

Mick

--- In electrichandbag@yahoogroups.com, "mickhannam" <mickhannam@...> wrote:
>
> Has anyone noticed that with the Mutek front end fitted the Rx performance on an external antenna is affected by the position of telescopic antenna.
>
> With the antenna retracted Rx is weak, extend it and then shorten so it is out of its holder but not fully extended and it is OK.
>
> Not sure if this is a problem with the telescopic touching the screened holder when it is retracted or if it is a capacitive effect when it is retracted in its holder.
>
> Performance with the telescopic seems fine.
>
> Any thoughts, or anyone seen the same thing?
>
> Mick
>

309. Thought experiment - replacing PCB?

Yahoo group: electrichandbag
Date: 2010-12-09 14:31:49 UTC
From: zaktherabbit
Topic: 309 Message: 309

Hi Chaps,

Just a thought experiment at the moment!

There has been much, much discussion about the AGC fault problem, and many possible fixes have been tried, none of which seem to completely cure the fault. The latests thinking seems to be that the poor grade SRBP PCBs used those days absorb any leaking electrolytes and this is what causes the problem.

Now, what im proposing as this 'thought experiment' is the complete replacement of the PCB set, using modern FR4 or better material. The reasoning behind this is thus -

paxolin boards are, im sure we all agree, crap. They are not good quality, they absorb any crud spilt into them, they are not very rigid. Modern board is much more risilient, very rigid, and will last a long time, certainly longer than poxy paxolin!

Also, these days there companies that will produce high quality, double sided, drilled, plated and silkscreened PCBs, in small quantities and at very reasonable cost. Getting replacement PCBs made is, from a cost point of view, highly practical.

So, what are the downsides to this idea? well, firstly, we would need a PCB layout, for both sides, of each board. The only practical way of obtaining this would be to use photographic techniques to copy an actual board. This of course means getting a FT-290mk1, stripping it completely, so that the boards can be copied. Im sure that the PCB company would do the copying task, but the dismantling would be our remit.

Second, once a set of boards were made, they would need to be repopulated with the parts removed from the radio. With any luck, careful work would mean everything would go back together. A plus point here, is that electrolytics could be batch replaced at the same time, likewise, certain obsolete and perhaps low performance parts could be replaced using high grade modern equivalents.

So, what are peoples opinions of this idea? If it were found to be practical, how many would want to obtain a set of boards and do this work?

The big, big problem in even getting started with this, is the need to initially dismantle a radio (preferably a working one!), which requires either someone with a spare biting the bullet, or someone with some spare cash taking the risky plunge

I'd like to hear peoples thoughts

cheers

Martin

310. Re: [electrichandbag] Thought experiment - replacing PCB?

Yahoo group: electrichandbag
Date: 2010-12-10 23:22:34 UTC
From: Gordon JC Pearce
Topic: 309 Message: 310

On Thu, 2010-12-09 at 14:31 +0000, zaktherabbit wrote:

> So, what are the downsides to this idea? well, firstly, we would need
> a PCB layout, for both sides, of each board. The only practical way of
> obtaining this would be to use photographic techniques to copy an
> actual board. This of course means getting a FT-290mk1, stripping it
> completely, so that the boards can be copied. Im sure that the PCB
> company would do the copying task, but the dismantling would be our
> remit.

My late father used to rebuild audio amplifiers with damaged boards
(amps of the kind of size that would take lumps out of the fibreglass
when all the semiconductors participated in a murder-suicide pact) by
desoldering all the components and photocopying the boards onto acetate
which could then be used to mask UV-sensitive etch resist.

Gordon MM0YEQ

311. FT290R circuit boards

Yahoo group: electrichandbag
Date: 2010-12-21 21:42:29 UTC
From: peter Laughton
Topic: 311 Message: 311

My 290r had a hickup today. Seems as if the mic cord had an internal break just above the plug. All fixed. Checking my records revealed that I bought it in 1979, that means its over 30 years old. Cost over $400 A back then. I bought the mobile mounting bracket and the sholder holster, along with some nicads and a charger. The nicads and charger are long gone, but the case and mount still work. A few faults over the years, pin diodes in xmiter when 18 months old was the worst. Its been subjected to several decades of vibration in my truck with only the pcb earth links needing resoldering occasionally. Interestingly, the PCB' s in mine are made of fibreglass, the electro caps are all 105 deg C types and are branded ELNA-japan. The small squelch board is bakelite though. The pcb tracks look hand drawn and are a bit rough looking. I dont think it was computer designed. The foam stuff attached near the speaker has disintergrated and I scaped it all off.
The filter is a bit corroded from the foamy stuff, but everything else looks OK. Of course, the memory batteries are dead, but as its switched on all the time thats not a problem. The mode switch acts up a bit due to being in the same position all the time. A few operations clears it up and it just keeps working. I have fitted a cctss board (home made using 555 ic) inside and apart from the need for a fair bit of injection to activate the repeater, it works well. My serial number is 002520. Its is switched on 24 hrs/day in the truck and connected through a 5/8 antenna and 50 watt amp. Works well, if a bit deaf due to the front end fet being weak.

I dont think there was ever a mk1, it was always the FT290R, even in the adverts.

Regards all

Peter Laughton

312. mutek board for possibly someone to make an etching diagram

Yahoo group: electrichandbag
Date: 2010-12-22 19:08:51 UTC
From: J
Topic: 312 Message: 312

hi; just thoght I'd let you know I've added some photos of the mutek board in my 290r mk1 could someone possibly work out/make a diagram so anyone could then etch their own board and then make a complete new unit as its impossible to buy them.
regards jim G1ASN

313. WANTED FT-790

Yahoo group: electrichandbag
Date: 2010-12-23 05:23:06 UTC
From: hennessyben@ymail.com
Topic: 313 Message: 313

I am after a FT-790 to drive my 5.76Ghz transverter.

Thanks

Ben

VK5TX

314. Test

Yahoo group: electrichandbag
Date: 2011-01-03 18:02:04 UTC
From: zaktherabbit
Topic: 83 Message: 314

Just a test of the messaging, please ignor

M

315. mutek for 790r mk1

Yahoo group: electrichandbag
Date: 2011-01-13 20:57:54 UTC
From: Jim
Topic: 315 Message: 315

Hi
Does any one know if there was a mutek board for the 790r mk1
if not does anyone know if the mutek board for the 290mk 1 will fit
i the 790r mk1
regards jim G1ASN

316. Re: mutek for 790r mk1

Yahoo group: electrichandbag
Date: 2011-01-14 22:26:19 UTC
From: zaktherabbit
Topic: 315 Message: 316

Ive never had a 790 so dont know if Mutek did a front-end board for it. What i can say though is that the Mutek board for the 290 is not compatable. The mutek is a tuned amplifier unit, obviously in the case of the board for the 290, tuned to 2m. It would not work in the 70cm FT-790

Martin G7MRV

--- In electrichandbag@yahoogroups.com, "Jim" <stansfield84@...> wrote:
>
> Hi
> Does any one know if there was a mutek board for the 790r mk1
> if not does anyone know if the mutek board for the 290mk 1 will fit
> i the 790r mk1
> regards jim G1ASN
>

317. mutek board for etching diagram

Yahoo group: electrichandbag
Date: 2011-01-20 17:56:16 UTC
From: Jim
Topic: 317 Message: 317

Hi jim here,
recently purchased another 290r mk1 with mutek board but this one was of the last types they made but it was hot glued to an original mutek board for the SLNA 145sb so if any one wants to make their own boards check the pics in the album ''mutek board'' in the photos section good luck and regards jim G1ASN

318. FT-290RII+NC72C charger

Yahoo group: electrichandbag
Date: 2011-01-23 20:36:00 UTC
From: Aron
Topic: 318 Message: 318

Hi All!

I have a mkII rig & 9 pcs of 1800mAh D-cells in the battery pack.
There is a real cheap and little wall charger NC72 for the new generation of Yaesu handheld radios. They have battery packs of 9,6 V when fully charged. My pack (because of including 9 cells) is 10,8 V.
This charger gives 12V & 500mA charging current.
Culd I use this NC72 charger for my mkII rig or not?
'73! de Aron

319. PL Tone

Yahoo group: electrichandbag
Date: 2011-01-25 08:17:56 UTC
From: raimo
Topic: 319 Message: 319

Hi All.

I would like to work satellites (ft290r1 / ft790r1)
and it is needed PL tones.

Is there any simple way to do it ?
Ready made chip or ?

73s de rami, oh6bi

320. Re: PL Tone

Yahoo group: electrichandbag
Date: 2011-01-25 20:36:24 UTC
From: glennpringle
Topic: 319 Message: 320

Hi Rami,

Try this company for the PL (CTCSS) tone encoder. There is an article in the database on where the inject the tone for best results.

http://www.cstech.co.uk/radio.html

Hope this helps

73s

Glenn
G0TGZ

--- In electrichandbag@yahoogroups.com, "raimo" <oh6bi@...> wrote:
>
> Hi All.
>
> I would like to work satellites (ft290r1 / ft790r1)
> and it is needed PL tones.
>
> Is there any simple way to do it ?
> Ready made chip or ?
>
> 73s de rami, oh6bi
>

321. Re: PL Tone

Yahoo group: electrichandbag
Date: 2011-01-25 22:06:43 UTC
From: zaktherabbit
Topic: 319 Message: 321

Rami,

As Glenn has shown, there are several companies that supply suitable encoders. It is also relatively simple to build one. The link below is to a simple circuit using a PIC microcontroller

http://www.spikey-mike.com/radio/ctcss.html

I have tested this and it works fine. In fact, Im in the process of organising a small run of PCBs for this circuit. They were meant to be available some time ago but ive not got around to it yet.

Martin

--- In electrichandbag@yahoogroups.com, "glennpringle" <glennpringle@...> wrote:
>
> Hi Rami,
>
>
> Try this company for the PL (CTCSS) tone encoder. There is an article in the database on where the inject the tone for best results.
>
> http://www.cstech.co.uk/radio.html
>
> Hope this helps
>
> 73s
>
> Glenn
> G0TGZ
>
> --- In electrichandbag@yahoogroups.com, "raimo" <oh6bi@> wrote:
> >
> > Hi All.
> >
> > I would like to work satellites (ft290r1 / ft790r1)
> > and it is needed PL tones.
> >
> > Is there any simple way to do it ?
> > Ready made chip or ?
> >
> > 73s de rami, oh6bi
> >
>

322. Re: PL Tone

Yahoo group: electrichandbag
Date: 2011-01-26 06:12:39 UTC
From: raimo
Topic: 319 Message: 322

Thanks Martin and Glenn.

link: http://www.spikey-mike.com/radio/ctcss.html
didnt open

but
http://www.cstech.co.uk/radio.html
opened

I will start planning.
I have old Icom mike which has plenty of buttons.
First to check how it is built. It came to mind that
encoder could be inside the mike ....
Maybe there is Yaesu mike with encoder.

...

by the way, I wrote here last summer about my 290, it was not
working and forgot to comment here.
Radio started working itself after staying in dry town QTH
one or two weeks. 290 was long time at summer cottage (island)
and where is more moisture in the air.
...

73s de rami, oh6bi

323. AGC fault with FT-790R Mk1

Yahoo group: electrichandbag
Date: 2011-01-26 07:08:26 UTC
From: gerbiltronics
Topic: 323 Message: 323

Hi all

I have a Mk1 FT-790R which I purchased some time ago as defective (it had the much-mentioned AGC fault). I have recently cured this by doing the usual 47k resistor mod across the b-e junction of Q1018 (the FT-790R circuit appears somewhat different to the FT-290R in this respect, but the principle is the same).

However, the s-meter appears to have a very slow decay on FM (i.e. if you are receiving an S9+ signal and this suddenly disappears, the meter drops to zero only gradually). In fact the s-meter decay rate is the same on FM as it is for USB/LSB modes - the only mode that DOES have a fast s-meter decay rate is CW.

Not sure yet whether this is just an s-meter issue or whether AGC is also subject to the same slow recovery, although monitoring of un-squelched receiver noise suggests that the AGC is OK.

Has anyone else experienced this with the FT-790R? Is it just an annoying "feature" of this model (unlikely, surely?) or do I have another fault with this example? I'm trying to work my way through the forest of switching diodes and other circuitry in the AGC control stages, but so far with no definite conclusions.

Regards
Kevin, ZL3KE
Shaky City, NZ

324. Re: PL Tone

Yahoo group: electrichandbag
Date: 2011-01-26 07:19:40 UTC
From: raimo
Topic: 319 Message: 324

I found FT790 / YM-50 optional DTMF microphone schema and uploaded
it to files section as Yaesu YM-50.pdf file.
How is this type of mike for sending PL tones, or are the PL tones
different than DTMF tones ?

73s de rami, oh6bi

--- In electrichandbag@yahoogroups.com, "raimo" <oh6bi@...> wrote:
>
> Hi All.
>
> I would like to work satellites (ft290r1 / ft790r1)
> and it is needed PL tones.
>
> Is there any simple way to do it ?
> Ready made chip or ?
>
> 73s de rami, oh6bi
>

325. Re: PL Tone

Yahoo group: electrichandbag
Date: 2011-01-26 10:57:05 UTC
From: zaktherabbit
Topic: 319 Message: 325

Rami,

yes, DTMF and PL (or CTCSS) tones are different. DTMF (Dual Tone Multi-Frequency, also known as Touchtone) are dialling tones, used for sending numbers, ie for accessing an IRLP node, or a PSTN dialler on a repeater (they are the tones a telephone sends)

CTCSS (Continuous Tone Coded Squelch System, also known as Private Line [PL, motorola] and QT[Quiet Tone, philips i think) uses a continuous low frequency tone (called sub-audible, as its filtered out by the receivers audio stages) to enable the audio output of the receiving station. This was originally intended for shared PMR repeaters, where each subscriber would be allocated a tone. With the tone activated they didnt have to listen to other users traffic, but the receiver would still indicate that the channel was in use (ie rx LED etc)

IN amateur use, DTMF is used as stated above, and occasionally for paging. CTCSS is used to prevent signals not intended for relay through a repeater from being relayed. Only a strong enough signal, correctly modulated and with the correct tone, will activate the repeater. In satellite use this prevents normal terestrial signals from being relayed and hence wasting the sats power.

Use of CTCSS on repeaters has mostly superceded the use of the 1750Hz toneburst now.

The main thing to consider with a CTCSS unit for the FT-290 (mk1) is where to fit it! If your radio does not have a Mutek board, there is a space there, if it has, you must either make a very compact board (maybe SMT?) or else mount it outside the radio. Sorry the link to Mikes circuit didnt work, it worked for me a moment ago. His circuit wires in using the memory switch to select the tone, and automatically enables to tone unit when repeater shift is selected.

Martin

--- In electrichandbag@yahoogroups.com, "raimo" <oh6bi@...> wrote:
>
>
>
> I found FT790 / YM-50 optional DTMF microphone schema and uploaded
> it to files section as Yaesu YM-50.pdf file.
> How is this type of mike for sending PL tones, or are the PL tones
> different than DTMF tones ?
>
> 73s de rami, oh6bi
>
> --- In electrichandbag@yahoogroups.com, "raimo" <oh6bi@> wrote:
> >
> > Hi All.
> >
> > I would like to work satellites (ft290r1 / ft790r1)

> > and it is needed PL tones.
> >
> > Is there any simple way to do it ?
> > Ready made chip or ?
> >
> > 73s de rami, oh6bi
> >
>

326. cstech.co.uk tone encoder fitting to 290r mk1

Yahoo group: electrichandbag
Date: 2011-02-01 10:33:33 UTC
From: Jim
Topic: 326 Message: 326

Hi Jim here,
Having recently purchased and built a couple of tone
encoders from C S TECHNOLOGY Ltd at www.cstech.co.uk (I purchased the 47 tone version) I have now fitted one into a Spare 290r mk1 and having tested it it seems to work. Please see the photos in ''CSTECH''
folder in photos, one is the schematics and the other is where to connect inside the radio it'self.
Hope this helps anyone who is going to fit a tone encoder into their radios regards Jim G1ASN.

327. Re: [electrichandbag] cstech.co.uk tone encoder fitting to 290r mk1

Yahoo group: electrichandbag
Date: 2011-02-01 11:27:44 UTC
From: raimo ilkka
Topic: 326 Message: 327

Thanks Jim.
I have to order one unit and try.

73s de rami, oh6bi

--- On Tue, 1/2/11, Jim <stansfield84@...> wrote:

> From: Jim <stansfield84@...>
> Subject: [electrichandbag] cstech.co.uk tone encoder fitting to 290r mk1
> To: electrichandbag@yahoogroups.com
> Date: Tuesday, 1 February, 2011, 12:33
> Hi Jim here,
>   Having recently
> purchased and built a couple of tone
>   encoders from C S TECHNOLOGY Ltd at
> www.cstech.co.uk (I purchased the 47 tone version) I have
> now fitted one into a Spare 290r mk1 and having tested it it
> seems to work. Please see the photos in ''CSTECH''
> folder in photos, one is the schematics and the other is
> where to connect inside the radio it'self.
>   Hope this helps anyone who is
> going to fit a tone encoder into their radios regards
> Jim G1ASN.
>
>
>
> ------------------------------------
>
> Yahoo! Groups Links
>
>
>   electrichandbag-fullfeatured@yahoogroups.com
>
>
>

328. New FT-290R Owner

Yahoo group: electrichandbag
Date: 2011-02-20 16:57:47 UTC
From: ve7bgp
Topic: 328 Message: 328

Last Thursday I had a good fortune to pick up a nice old FT-290R Portable from some SK items that came into our Club Meeting. Yesterday I loaded it with 8 Pre-Charged RayO'Vac Platinum 3000 MAH Batteries and got good signal reports on a couple of our non PL Repeater. They still exist in Canada. I already picked up some info on some of the Mods the former owner performed. Mine has a BNC Connector on the Front in place of the Telescopic Antenna. I suspect it might have a Mutex Board. My old AEA Hot Rod Antenna looks great on this rig. I also have had a Really Nice FT-208R Handie the last Couple of years I am proud of for Classic Exchange Contests, It helped me win top score for FM mode a couple of times. These Buddies also join my FT-GX Brothers my Venerable old FT-757GX Having a lot of fun with it in the CW ARRL DX Contest this Weekend and It's Bigger FT-767GX Brother What a Great all round Rig!!! I am member of the FT-767 Group. Mine has the 2 meter Transverter Module. Its neat to see another new member Joined yesterday. Just like it was a big thrill to have my FT-290R Join my GX Brothers in my shack. I am looking forward to next CX Contest in September and some Portable QRP SSB in the June Contest. I will be back after the CW Contest Back to fun with my Wonderful "You are Part of the Pile-up" QSK FT-757GX June '84 SN.
73
Gerry VE7BGP

329. Re: 290 R Mk 2

Yahoo group: electrichandbag
Date: 2011-02-24 20:15:11 UTC
From: m0xvf
Topic: 329 Message: 329

Hi all,

I have owned my Mk2 290 R since December,and love it for use portable and at the home QTH.Its works ok but there a couple of things I would like to put right as it were.The display bulb has gone (no suprise) and the audio on FM is "superb" apparently,but SSB audio lacks any punch,so I would like to ask forum members for any info on changing the display bulb(nightmare like the Mk1 ?), and the location for the audio trimmer-is there a seperate adjustment for SSB audio ?

Many thanks and would appreciate any help.

Jeremy

M0XVF

330. FT-290R II Pdf Manual

Yahoo group: electrichandbag
Date: 2011-03-09 16:49:16 UTC
From: ve7bgp
Topic: 330 Message: 330

Hello All
I have added the FT-290 MKII owners Manual to the files Section this Morning.
73
Gerry VE7BGP

331. high (er) performance antenna

Yahoo group: electrichandbag
Date: 2011-03-27 21:59:43 UTC
From: rpcrichton
Topic: 331 Message: 331

Hi Group , I am looking for a screw in 1/4 wave to see if I can improve the performance whilst keeping my 290 mk 1 as original , I have all 6 sets mk 1 & 2 on 2 6 & 70cms in my collection.

Any suggestions

Best 73 from Stockport Uk Paul

332. Re: whip antenna on 290R

Yahoo group: electrichandbag
Date: 2011-03-28 19:24:36 UTC
From: Andrew Davis
Topic: 332 Message: 332

My 290R has the original screw-in whip which looks close to a quarter wave to me, allowing for slight loading due to its proximity to the case etc. Any longer antenna connected instead of that whip would not present the same impedance to the radio.

_____
Andrew Davis
VK1DA Canberra --- VK2UH Yass
web:vk1da.info, vkfaq.ampr.org

333. lost frequencies after a short caused a fault

Yahoo group: electrichandbag
Date: 2011-03-30 21:39:37 UTC
From: Jim
Topic: 333 Message: 333

Hi I've got a problem I've just recently designed my own low noise pre amp based on the old ''mutek board 145snla'' and due to a cock up i caused a short on the 12v live feed to it and this resulted in the radio now only working from 144.000mhz to 145.995mhz, has anyone any ideas to get the frequencies back that I have lost ie 146.00mhz to 148.000mhz.
regards jim G1ASN

334. Re: [electrichandbag] lost frequencies after a short caused a fault

Yahoo group: electrichandbag
Date: 2011-04-02 07:08:41 UTC
From: Andrew Davis
Topic: 333 Message: 334

Hi Jim,

assuming you are referring to the 290R:

on mods.dk there is an article about how the 290R selects the frequency band, based on a set of diodes on the controller board. The combination needed could be found there.

Good luck fixing it.

Andrew Davis
VK1DA Canberra --- VK2UH Yass
web:vk1da.info, vkfaq.ampr.org

From: Jim <stansfield84@...>
To: electrichandbag@yahoogroups.com
Sent: Thu, 31 March, 2011 8:39:37 AM
Subject: [electrichandbag] lost frequencies after a short caused a fault

Hi I've got a problem I've just recently designed my own low noise pre amp based on the old ''mutek board 145snla'' and due to a cock up i caused a short on the 12v live feed to it and this resulted in the radio now only working from 144.000mhz to 145.995mhz, has anyone any ideas to get the frequencies back that I have lost ie 146.00mhz to 148.000mhz.

regards jim G1ASN

335. FT290R squelch problems

Yahoo group: electrichandbag
Date: 2011-04-03 18:29:24 UTC
From: Liviu
Topic: 335 Message: 335

Hello,
I own for a long time, with my 23 cm and 3 cm DB6NT's Xverters, YAESU FT290R. Until now I was very pleased with "toy". He did excellent work. For some time I have a delicate problem. After starting, the first 20 minutes transceiver function normally and all commands ok. After 20 minutes, in FM mode, the squelch can not be stopped in any way and seems that squelch button has no function. Have the same RX, but only with squelch always on and that made me nervous. Now try to fix that bug.
I have INSTRUCTION MANUAL FT290R, all schematics inside, all units details, but MAIN UNIT details missing. Have anyone SERVICE MANUAL FT290R ? I need especially MAIN UNIT details. Without this details, it is very hard to physical locate the components from the scheme drawn in FT290R INSTRUCTION MANUAL and positions in PCB. To find C97 and C94 in MAIN UNIT PCB, to extract and replace I spent almost all day. So it's hard to continue in that way, somewhere there must be a complete information about MAIN UNIT. coils, capacitors, transistors and resistors positions, voltages, bla bla bla.
Can anyone help me ?
Best regards

YO4FNG Liviu

336. Re: FT290R squelch problems

Yahoo group: electrichandbag
Date: 2011-04-03 21:13:14 UTC
From: Jim
Topic: 335 Message: 336

--- In electrichandbag@yahoogroups.com, "Liviu" <electronicguest@...> wrote:
>
> Hello,
> I own for a long time, with my 23 cm and 3 cm DB6NT's Xverters, YAESU FT290R. Until now I was very pleased with "toy". He did excellent work. For some time I have a delicate problem. After starting, the first 20 minutes transceiver function normally and all commands ok. After 20 minutes, in FM mode, the squelch can not be stopped in any way and seems that squelch button has no function. Have the same RX, but only with squelch always on and that made me nervous. Now try to fix that bug.
> I have INSTRUCTION MANUAL FT290R, all schematics inside, all units details, but MAIN UNIT details missing. Have anyone SERVICE MANUAL FT290R ? I need especially MAIN UNIT details.
> Without this details, it is very hard to physical locate the components from the scheme drawn in FT290R INSTRUCTION MANUAL and positions in PCB. To find C97 and C94 in MAIN UNIT PCB, to extract and replace I spent almost all day. So it's hard to continue in that way, somewhere there must be a complete information about MAIN UNIT. coils, capacitors, transistors and resistors positions, voltages, bla bla bla.
> Can anyone help me ?
> Best regards
>
> YO4FNG Liviu
>
hi liviu, if you look in the files in this group you will find several files with copies of the ft290 manual and schematics I hope this helps regards jim G1ASN

337. RE:- lost frequencies

Yahoo group: electrichandbag
Date: 2011-04-03 21:17:10 UTC
From: Jim
Topic: 337 Message: 337

Hi Jim G1ASN here just to update I have since found a mod that dealt with my problem so I bit the bullet and opend up the rig and cut the jumper and the frequencies are now all back. Regards Jim G1ASN

338. Re: FT290R squelch problems

Yahoo group: electrichandbag
Date: 2011-04-09 05:13:21 UTC
From: Liviu
Topic: 335 Message: 338

I need only complete MAIN UNIT PCB details. Resistors and capacitors positions on the PCB. Where can I find ?

YO4FNG
Liviu
--- In electrichandbag@yahoogroups.com, "Jim" <stansfield84@...> wrote:
>
>
>
> --- In electrichandbag@yahoogroups.com, "Liviu" <electronicguest@> wrote:
> >
> > Hello,
> > I own for a long time, with my 23 cm and 3 cm DB6NT's Xverters, YAESU FT290R. Until now I was very pleased with "toy". He did excellent work. For some time I have a delicate problem. After starting, the first 20 minutes transceiver function normally and all commands ok. After 20 minutes, in FM mode, the squelch can not be stopped in any way and seems that squelch button has no function. Have the same RX, but only with squelch always on and that made me nervous. Now try to fix that bug.
> > I have INSTRUCTION MANUAL FT290R, all schematics inside, all units details, but MAIN UNIT details missing. Have anyone SERVICE MANUAL FT290R ? I need especially MAIN UNIT details.
> > Without this details, it is very hard to physical locate the components from the scheme drawn in FT290R INSTRUCTION MANUAL and positions in PCB. To find C97 and C94 in MAIN UNIT PCB, to extract and replace I spent almost all day. So it's hard to continue in that way, somewhere there must be a complete information about MAIN UNIT. coils, capacitors, transistors and resistors positions, voltages, bla bla bla.
> > Can anyone help me ?
> > Best regards
> >
> > YO4FNG Liviu
> >
> hi liviu, if you look in the files in this group you will find several files with copies of the ft290 manual and schematics I hope this helps regards jim G1ASN
>

339. MAIN UNIT 290R - Component layout diagrams/photos?

Yahoo group: electrichandbag
Date: 2011-04-09 21:32:33 UTC
From: Liviu
Topic: 335 Message: 339

I can not believe that there is nowhere the MAIN UNIT (for 290R) layout diagram. Can not lose a lot of time to identify components from the pdf schematic to reality. Any help ?

YO4FNG
Liviu

340. Re: MAIN UNIT 290R - Component layout diagrams/photos?

Yahoo group: electrichandbag
Date: 2011-04-13 08:02:39 UTC
From: zaktherabbit
Topic: 335 Message: 340

Unfortunately, the photograph in the manual is the only layout anyone has found.

I would create a full diagram if i could get hold of a scrap set to dismantle and map, but so far i havent been able to do this.

Im afraid the only way is to locate the parts using a multimeter and eyesight!

M

--- In electrichandbag@yahoogroups.com, "Liviu" <electronicguest@...> wrote:
>
> I can not believe that there is nowhere the MAIN UNIT (for 290R) layout diagram. Can not lose a lot of time to identify components from the pdf schematic to reality. Any help ?
>
> YO4FNG
> Liviu
>

341. Re: [electrichandbag] Re: MAIN UNIT 290R - Component layout diagrams/photos?

Yahoo group: electrichandbag
Date: 2011-04-13 11:04:27 UTC
From: Mansueto Grech
Topic: 335 Message: 341

I too am looking for a board layout for the FT290R.
Cannot believe that Yaesu don't have or didn't make one for this model!!!!!!!!!
73's
Mans. 9H1GB

On 13 April 2011 10:02, zaktherabbit <barfield673@...> wrote:

>
>
> Unfortunately, the photograph in the manual is the only layout anyone has
> found.
>
> I would create a full diagram if i could get hold of a scrap set to
> dismantle and map, but so far i havent been able to do this.
>
> Im afraid the only way is to locate the parts using a multimeter and
> eyesight!
>
> M
>
>
> --- In electrichandbag@yahoogroups.com, "Liviu" <electronicguest@...>
> wrote:
> >
> > I can not believe that there is nowhere the MAIN UNIT (for 290R) layout
> diagram. Can not lose a lot of time to identify components from the pdf
> schematic to reality. Any help ?
> >
> > YO4FNG
> > Liviu
> >
>
>
>

342. Re: MAIN UNIT 290R - Component layout diagrams/photos?

Yahoo group: electrichandbag
Date: 2011-04-13 16:21:51 UTC
From: rpcrichton
Topic: 335 Message: 342

Hi group all the info is in the technical supplement, Now posting to the files page as a pdf in a zip file best 73s Paul m1bpt handheld and yaesu collector Stockport UK
--- In electrichandbag@yahoogroups.com, Mansueto Grech <mansueto.grech@...> wrote:
>
> I too am looking for a board layout for the FT290R.
> Cannot believe that Yaesu don't have or didn't make one for this
> model!!!!!!!!!
> 73's
> Mans. 9H1GB
>
>
> On 13 April 2011 10:02, zaktherabbit <barfield673@...> wrote:
>
> > >
> > >
> > > Unfortunately, the photograph in the manual is the only layout anyone has
> > > found.
> > >
> > > I would create a full diagram if i could get hold of a scrap set to
> > > dismantle and map, but so far i havent been able to do this.
> > >
> > > Im afraid the only way is to locate the parts using a multimeter and
> > > eyesight!
> > >
> > > M
> > >
> > >
> > > --- In electrichandbag@yahoogroups.com, "Liviu" <electronicguest@>
> > > wrote:
> > > >
> > > > I can not believe that there is nowhere the MAIN UNIT (for 290R) layout
> > > diagram. Can not lose a lot of time to identify components from the pdf
> > > schematic to reality. Any help ?
> > > >
> > > > YO4FNG
> > > > Liviu
> > > >
> > >
> > >
> > >
> >
>

343. New file uploaded to electrichandbag

Yahoo group: electrichandbag
Date: 2011-04-13 16:24:41 UTC
From: electrichandbag@yahoogroups.com
Topic: 2 Message: 343

Hello,

This email message is a notification to let you know that
a file has been uploaded to the Files area of the electrichandbag
group.

File : /FT-290R_Allignment_and_schematic.zip
Uploaded by : rpcrichton <m1bpt@...>
Description : Ft full schematic and main tx allignment technical supplement

You can access this file at the URL:
http://groups.yahoo.com/group/electrichandbag/files/FT-290R_Allignment_and_schematic.zip

To learn more about file sharing for your group, please visit:
http://help.yahoo.com/l/us/yahoo/groups/original/members/web/index.html
Regards,

rpcrichton <m1bpt@...>

344. Re: MAIN UNIT 290R - Component layout diagrams/photos?

Yahoo group: electrichandbag
Date: 2011-04-13 10:46:11 UTC
From: Liviu
Topic: 335 Message: 344

Tnx answer, already saw that.
It's over my head to understand, at that time, how the guarantees were made all over the world in YAESU's representative office. I do not think they could afford to lose hours to identify the components on MAIN UNIT pcb. It would have taken forever to send the transceiver back to Japan for repair and to bring it to the buyer.
I will try to ask YAESU for help; in any case the MAIN UNIT layouts was first designed and made after a factory project. Any respectable company can provide plans for equipments out of production. I have appealed until today many companies for that kind of help and all sent me the required details. Has anyone done that before ?

YO4FNG
Liviu

--- In electrichandbag@yahoogroups.com, "zaktherabbit" <barfield673@...> wrote:
>
> Unfortunately, the photograph in the manual is the only layout anyone has found.
>
> I would create a full diagram if i could get hold of a scrap set to dismantle and map, but so far i havent been able to do this.
>
> Im afraid the only way is to locate the parts using a multimeter and eyesight!
>
>
> M
>
> --- In electrichandbag@yahoogroups.com, "Liviu" <electronicguest@> wrote:
> >
> > I can not believe that there is nowhere the MAIN UNIT (for 290R) layout diagram. Can not lose a lot of time to identify components from the pdf schematic to reality. Any help ?
> >
> > YO4FNG
> > Liviu
> >
>

345. Re: [electrichandbag] MAIN UNIT 290R - Component layout diagrams/photos?

Yahoo group: electrichandbag
Date: 2011-04-10 11:38:58 UTC
From: Andrew Davis
Topic: 335 Message: 345
Attachments: 1 described; binary payloads are missing from this source WARC

Liviu,

I have an alignment manual PDF. But only a few selected components are identified. It is not a really detailed manual but perhaps it is of some help.

2.6 MB attached. it will be linked from this email but stored on Yahoo groups server.

73

Andrew Davis
VK1DA Canberra --- VK2UH Yass
web:vk1da.info, vkfaq.ampr.org

From: Liviu <electronicguest@...>
To: electrichandbag@yahoogroups.com
Sent: Sun, 10 April, 2011 7:32:33 AM
Subject: [electrichandbag] MAIN UNIT 290R - Component layout diagrams/photos?

I can not believe that there is nowhere the MAIN UNIT (for 290R) layout diagram. Can not lose a lot of time to identify components from the pdf schematic to reality. Any help ?

YO4FNG
Liviu

346. Re: New file uploaded to electrichandbag

Yahoo group: electrichandbag
Date: 2011-04-13 20:15:16 UTC
From: Liviu
Topic: 2 Message: 346

Already have this. It's just a small extract from Instruction Manual FT290R and it's not what I was looking for.
Tnx anyway.

YO4FNG
Liviu

--- In electrichandbag@yahoogroups.com, electrichandbag@yahoogroups.com wrote:
>
>
> Hello,
>
> This email message is a notification to let you know that
> a file has been uploaded to the Files area of the electrichandbag
> group.
>
> File : /FT-290R_Allignment_and_schematic.zip
> Uploaded by : rpcrichton <m1bpt@...>
> Description : Ft full schematic and main tx allignment technical supplement
>
> You can access this file at the URL:
> http://groups.yahoo.com/group/electrichandbag/files/FT-290R_Allignment_and_schematic.zip
>
> To learn more about file sharing for your group, please visit:
> http://help.yahoo.com/l/us/yahoo/groups/original/members/web/index.html
> Regards,
>
> rpcrichton <m1bpt@...>
>

347. Hi New Member

Yahoo group: electrichandbag
Date: 2011-04-15 21:23:35 UTC
From: jswarbrick@xtra.co.nz
Topic: 347 Message: 347

Hi,

Greetings from New Zealand..

I'm currently waiting for delivery of an FT 290R II along with the 25w Amp, battery box, case, antenna,charger and the manual etc.. The rig wil give me some ability to get onto 2m SSB which is a mode I have not explored before.

I also like mountain topping so I'm hoping the 'new' rig will be good for that.

If anyone has some easy to follow plans for a 2m Yagi for SSB or FM work then point me in the right direction...

Also is there a particular type of 'c' cell that is reccomended for the battery box or is it better to run it off of a SLAB??

Thanks

John

348. Re: [electrichandbag] Hi New Member

Yahoo group: electrichandbag
Date: 2011-04-16 06:07:33 UTC
From: Geoff Blake
Topic: 347 Message: 348

Hi John and welcome

On 15 April 2011 22:23, jswarbrick@... <jswarbrick@...> wrote:
> Hi,

> Greetings from New Zealand..

Greetings from your Antipodes.

> I'm currently waiting for delivery of an FT 290R II along with the 25w Amp, battery box, case, antenna,charger and the manual etc.. The rig wil give me some ability to get onto 2m SSB which is a mode I have not explored before.

I too have much the same kit. 2m SSB is a fun mode especially with a
little power

> I also like mountain topping so I'm hoping the 'new' rig will be good for that.

Hmm, no mountains near me, I live in the flat lands of East Anglia.
However, high points, as long as they are higher than the surrounding
lands show benefit.

> If anyone has some easy to follow plans for a 2m Yagi for SSB or FM work then point me in the right direction...

You need to decide first how big a yagi. I have an 8 ele which In take
out portable atop a 12ft tripod mast. I would not carry that lot
anywhere, except a few feet from the boot of the car!!

Have a look at the "Summits On The Air" website
<http://www.sota.org.uk/>. SOTA is an international group who put
"Summits On The Air" and you can get small collapsable yagi's from
there. If you dig deep enough you will find Kent Britains site and he
has some simple yagi designs that you can easily make yourself
<http://www.wa5vjb.com/yagi-pdf/cheapyagi.pdf>.

> Also is there a particular type of 'c' cell that is reccomended for the battery box or is it better to run it off of a SLAB??

If you have not already discovered, you cannot run the 25W amp from
the battery box. I would use a SLAB if weight is not a problem, i.e.
you are fit or not going to walk more than a few feet from your car.
Otherwise consider Lithium battery technology. In my battery boxes (I
have three, one each for the FT690, FT790 and FT290, all RII's) I have
two sets of NimH's and one set of NiCd's (came with one of the
radio's). I also have an intelligent fast charger.

If you are going to use your car battery as a source of power, make sure that you have an alternative means of starting your car, it is easy to get carried away and suddenly, no car battery! I use a separate battery.

Beware, the FT290 series are not renowned for the best RX performance. A company called Mutek used to make a replacement front end, but alas they are no more. I use external linear amplifiers (DAIWA) with incorporated RX pre-amps which give me ~30W on 2m and 70cm and a reasonable NF.

Good luck and have fun.

Geoff G8GNZ

349. Hi New Member

Yahoo group: electrichandbag
Date: 2011-04-15 21:16:12 UTC
From: jswarbrick@xtra.co.nz
Topic: 347 Message: 349

Hi,

Greetings from New Zealand..

I'm currently waiting for delivery of an FT 290R II along with the 25w Amp, battery box, case, antenna,charger and the manual etc.. The rig wil give me some ability to get onto 2m SSB which is a mode I have not explored before.

I also like mountain topping so I'm hoping the 'new' rig will be good for that.

If anyone has some easy to follow plans for a 2m Yagi for SSB or FM work then point me in the right direction...

Also is there a particular type of 'c' cell that is reccomended for the battery box or is it better to run it off of a SLAB??

Thanks

John

350. Re: [electrichandbag] Hi New Member

Yahoo group: electrichandbag
Date: 2011-04-15 23:49:46 UTC
From: Andrew Davis
Topic: 347 Message: 350

John,

the designs for yagis are plentiful. You need to decide whether it's something you need to carry and assemble on site, or an antenna you can build and carry in assembled form. How long a yagi do you need, what are you aiming to achieve?

A search engine will yield plenty of hits. A lot of people have found Kent Britain's designs for "cheap yagis" quite easy to replicate and quite effective. Search for "cheap yagis" or WA5VJB.

Mountaintopping with 25w combined with a 4 element beam will yield moderate distances up to say 200km depending on terrain. Could be as low as 10km when surrounding mountains are higher, and when you are in an area without many locals active on 2m ssb. Generally a calling frequency or a sked will make all the difference. Random contacts on 2m ssb would be plain optimistic in the area I live in, but if you are near a major city it might be ok for you. It is common for there to be a time of day when locals like to make the best of conditions (typically early morning within an hour or two of sunrise) or propagation via aircraft reflections. Knowing when that time is, and the right frequency for making calls, will make a big difference to how many contacts are possible. Getting to know the local operators who use 2m ssb will also be helpful as they are a source of advice, possibly loan antennas and most importantly, contacts once you get on the band.

hope this helps...

73

Andrew Davis
VK1DA Canberra --- VK2UH Yass
web:vk1da.info, vkfaq.ampr.org

From: "jswarbrick@..." <jswarbrick@xtra.co.nz>
To: electrichandbag@yahoogroups.com
Sent: Sat, 16 April, 2011 7:23:35 AM
Subject: [electrichandbag] Hi New Member

Hi,

Greetings from New Zealand..

I'm currently waiting for delivery of an FT 290R II along with the 25w Amp, battery box, case, antenna,charger and the manual etc.. The rig wil give me some ability to get onto 2m SSB which is a mode I have not explored before.

I also like mountain topping so I'm hoping the 'new' rig will be good for that.

If anyone has some easy to follow plans for a 2m Yagi for SSB or FM work then point me in the right direction...

Also is there a particular type of 'c' cell that is reccomended for the battery box or is it better to run it off of a SLAB??

Thanks

John

351. Re: Hi New Member

Yahoo group: electrichandbag
Date: 2011-04-16 20:45:42 UTC
From: zaktherabbit
Topic: 347 Message: 351

I use the designs of Martin DK7ZB -

http://www.qsl.net/d/dk7zb//start1.htm

they are very easy and very forgiving. The 3-el field beam i use on 2m is made from tube and hardware from an old FM broadcast band antenna, Martin helped me with modifying the calculations to take account of the different material dimensions. The result worked so well first time i never bothered to improve it!

Martin G7MRV

--- In electrichandbag@yahoogroups.com, "jswarbrick@..." <jswarbrick@...> wrote:
>
> Hi,
>
> Greetings from New Zealand..
>
> I'm currently waiting for delivery of an FT 290R II along with the 25w Amp, battery box, case, antenna,charger and the manual etc.. The rig wil give me some ability to get onto 2m SSB which is a mode I have not explored before.
>
> I also like mountain topping so I'm hoping the 'new' rig will be good for that.
>
> If anyone has some easy to follow plans for a 2m Yagi for SSB or FM work then point me in the right direction...
>
> Also is there a particular type of 'c' cell that is reccomended for the battery box or is it better to run it off of a SLAB??
>
> Thanks
>
> John
>

352. Re: [electrichandbag] Re: Hi New Member

Yahoo group: electrichandbag
Date: 2011-04-16 21:31:16 UTC
From: Liviu Babi
Topic: 347 Message: 352

hello John
my webpage:

http://www.qsl.net/yo4fng/

You can see at 144 MHz button the complete detail for building DK7ZB antenna.

It's easy

73 !

From: zaktherabbit <barfield673@btinternet.com>
To: electrichandbag@yahoogroups.com
Sent: Sat, April 16, 2011 11:45:42 PM
Subject: [electrichandbag] Re: Hi New Member

I use the designs of Martin DK7ZB -

http://www.qsl.net/d/dk7zb//start1.htm

they are very easy and very forgiving. The 3-el field beam i use on 2m is made
from tube and hardware from an old FM broadcast band antenna, Martin helped me
with modifying the calculations to take account of the different material
dimensions. The result worked so well first time i never bothered to improve it!

Martin G7MRV

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>point me in the right direction...
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> Also is there a particular type of 'c' cell that is reccomended for the battery
>box or is it better to run it off of a SLAB??

>
> Thanks
>
> John
>

353. RE: [electrichandbag] Hi New Member

Yahoo group: electrichandbag
Date: 2011-04-17 09:19:12 UTC
From: John Swarbrick
Topic: 347 Message: 353

Hi Geoff,

Thanks for the welcome...

I have had a good look at SOTA. While we have some good hills and mountains here in NZ we do not have a SOTA association. Go Figure!!

Anyhow thanks for the advice.

Cheers

John

From: electrichandbag@yahoogroups.com [mailto:electrichandbag@yahoogroups.com] On Behalf Of Geoff Blake
Sent: Saturday, 16 April 2011 6:08 p.m.
To: electrichandbag@yahoogroups.com
Subject: Re: [electrichandbag] Hi New Member

Hi John and welcome

On 15 April 2011 22:23, jswarbrick@... <mailto:jswarbrick%40xtra.co.nz> <jswarbrick@... <mailto:jswarbrick%40xtra.co.nz> > wrote:
> Hi,

> Greetings from New Zealand..

Greetings from your Antipodes.

> I'm currently waiting for delivery of an FT 290R II along with the 25w Amp, battery box, case, antenna,charger and the manual etc.. The rig wil give me some ability to get onto 2m SSB which is a mode I have not explored before.

I too have much the same kit. 2m SSB is a fun mode especially with a little power

> I also like mountain topping so I'm hoping the 'new' rig will be good for that.

Hmm, no mountains near me, I live in the flat lands of East Anglia. However, high points, as long as they are higher than the surrounding lands show benefit.

> If anyone has some easy to follow plans for a 2m Yagi for SSB or FM work then point me in the right direction...

You need to decide first how big a yagi. I have an 8 ele which In take out portable atop a 12ft tripod mast. I would not carry that lot anywhere, except a few feet from the boot of the car!!

Have a look at the "Summits On The Air" website <http://www.sota.org.uk/>. SOTA is an international group who put "Summits On The Air" and you can get small collapsable yagi's from there. If you dig deep enough you will find Kent Britains site and he has some simple yagi designs that you can easily make yourself <http://www.wa5vjb.com/yagi-pdf/cheapyagi.pdf>.

> Also is there a particular type of 'c' cell that is reccomended for the battery box or is it better to run it off of a SLAB??

If you have not already discovered, you cannot run the 25W amp from the battery box. I would use a SLAB if weight is not a problem, i.e. you are fit or not going to walk more than a few feet from your car. Otherwise consider Lithium battery technology. In my battery boxes (I have three, one each for the FT690, FT790 and FT290, all RII's) I have two sets of NimH's and one set of NiCd's (came with one of the radio's). I also have an intelligent fast charger.

If you are going to use your car battery as a source of power, make sure that you have an alternative means of starting your car, it is easy to get carried away and suddenly, no car battery! I use a separate battery.

Beware, the FT290 series are not renowned for the best RX performance. A company called Mutek used to make a replacement front end, but alas they are no more. I use external linear amplifiers (DAIWA) with incorporated RX pre-amps which give me ~30W on 2m and 70cm and a reasonable NF.

Good luck and have fun.

Geoff G8GNZ

354. RE: [electrichandbag] Hi New Member

Yahoo group: electrichandbag
Date: 2011-04-17 09:21:44 UTC
From: John Swarbrick
Topic: 347 Message: 354
Attachments: 2 described; binary payloads are missing from this source WARC

Hi Andrew,

We have a similar situation here in NZ with activity levels on 2m SSB.

Anyhow I've been putting a few feelers out on the local nets so I can sort out some prearranged QSO's etc...

Thanks for your thoughts and advice

73

John

From: electrichandbag@yahoogroups.com [mailto:electrichandbag@yahoogroups.com] On Behalf Of Andrew Davis
Sent: Saturday, 16 April 2011 11:50 a.m.
To: electrichandbag@yahoogroups.com
Subject: Re: [electrichandbag] Hi New Member

John,

the designs for yagis are plentiful. You need to decide whether it's something you need to carry and assemble on site, or an antenna you can build and carry in assembled form. How long a yagi do you need, what are you aiming to achieve?

A search engine will yield plenty of hits. A lot of people have found Kent Britain's designs for "cheap yagis" quite easy to replicate and quite effective. Search for "cheap yagis" or WA5VJB.

Mountaintopping with 25w combined with a 4 element beam will yield moderate distances up to say 200km depending on terrain. Could be as low as 10km when surrounding mountains are higher, and when you are in an area without many locals active on 2m ssb. Generally a calling frequency or a sked will make all the difference. Random contacts on 2m ssb would be plain optimistic in the area I live in, but if you are near a major city it might be ok for you. It is common for there to be a time of day when locals like to make the best of conditions (typically early morning within an hour or two of sunrise) or propagation via aircraft reflections. Knowing when that time is, and the right frequency for making calls, will make a big difference to how many contacts are possible. Getting to know the local operators who use 2m ssb will also be helpful as they are a source of advice, possibly loan antennas and most importantly, contacts once you get on the band.

hope this helps...

73

Andrew Davis
VK1DA Canberra --- VK2UH Yass
web: vk1da.inf <http://vk1da.info/> o <http://vk1da.info/> , vkfaq.ampr.org
<http://vkfaq.ampr.org/index.php>

_____

From: "jswarbrick@..." <jswarbrick@...>
To: electrichandbag@yahoogroups.com
Sent: Sat, 16 April, 2011 7:23:35 AM
Subject: [electrichandbag] Hi New Member

Hi,

Greetings from New Zealand..

I'm currently waiting for delivery of an FT 290R II along with the 25w Amp, battery box, case, antenna,charger and the manual etc.. The rig wil give me some ability to get onto 2m SSB which is a mode I have not explored before.

I also like mountain topping so I'm hoping the 'new' rig will be good for that.

If anyone has some easy to follow plans for a 2m Yagi for SSB or FM work then point me in the right direction...

Also is there a particular type of 'c' cell that is reccomended for the battery box or is it better to run it off of a SLAB??

Thanks

John

355. RE: [electrichandbag] Re: Hi New Member

Yahoo group: electrichandbag
Date: 2011-04-17 09:25:17 UTC
From: John Swarbrick
Topic: 347 Message: 355

Hi,

That's a really good website...

I've also got a load of bits from some TV antennas here so I'll get into construction mode tomorrow. I should have enough bits for a couple of antennas. I might start with a simple one to get me on SSB after a fashion then look at a more refined design later..

I really like the fact he gives the differing dims for different diameters of elements etc...

Thanks a lot

73

John

From: electrichandbag@yahoogroups.com [mailto:electrichandbag@yahoogroups.com] On Behalf Of zaktherabbit
Sent: Sunday, 17 April 2011 8:46 a.m.
To: electrichandbag@yahoogroups.com
Subject: [electrichandbag] Re: Hi New Member

I use the designs of Martin DK7ZB -

http://www.qsl.net/d/dk7zb//start1.htm
<http://www.qsl.net/d/dk7zb/start1.htm>

they are very easy and very forgiving. The 3-el field beam i use on 2m is made from tube and hardware from an old FM broadcast band antenna, Martin helped me with modifying the calculations to take account of the different material dimensions. The result worked so well first time i never bothered to improve it!

Martin G7MRV

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>
> Greetings from New Zealand..
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>
> I also like mountain topping so I'm hoping the 'new' rig will be good for
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>
> If anyone has some easy to follow plans for a 2m Yagi for SSB or FM work
then point me in the right direction...
>
> Also is there a particular type of 'c' cell that is reccomended for the
battery box or is it better to run it off of a SLAB??
>
> Thanks
>
> John
>

356. RE: [electrichandbag] Re: Hi New Member

Yahoo group: electrichandbag
Date: 2011-04-17 09:26:04 UTC
From: John Swarbrick
Topic: 347 Message: 356

Hi Liviu

Great website!!

Thanks for pointing me towards it..

73

John

From: electrichandbag@yahoogroups.com [mailto:electrichandbag@yahoogroups.com] On Behalf Of Liviu Babi
Sent: Sunday, 17 April 2011 9:31 a.m.
To: electrichandbag@yahoogroups.com
Subject: Re: [electrichandbag] Re: Hi New Member

hello John
my webpage:

http://www.qsl.net/yo4fng/

You can see at 144 MHz button the complete detail for building DK7ZB antenna.

It's easy

73 !

From: zaktherabbit <barfield673@btinternet.com>
To: electrichandbag@yahoogroups.com
Sent: Sat, April 16, 2011 11:45:42 PM
Subject: [electrichandbag] Re: Hi New Member

I use the designs of Martin DK7ZB -

http://www.qsl.net/d/dk7zb//start1.htm <http://www.qsl.net/d/dk7zb/start1.htm>

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Martin G7MRV

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> Hi,

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>
> Thanks
>
> John
>

357. Easter Break with the FT 290 R II

Yahoo group: electrichandbag
Date: 2011-04-25 09:21:41 UTC
From: jswarbrick@xtra.co.nz
Topic: 357 Message: 357

Hi,

Well after a wee wait 'my' 290 arrived and I took it away with us over the easter break. I have had some good fun working pedestrian portable into the local repeaters using the c cell battery pack and the standard rubber ducky antenna.

I also had some fun tonight working into a 2m SSB net that we got together with a few QSO's to folk atound my home QTH here in Hamilton.

So I made my first 2m SSB QSO...

All in all I'm having fun.. Only 1 thing if the battery box is flexed slightly the rig cut off and you have to switch the rig off unmount the battery box remount and then switch on again.. Odd anyone got any ideas on this??

73

John

358. Re: Easter Break with the FT 290 R II

Yahoo group: electrichandbag
Date: 2011-04-25 21:36:46 UTC
From: zaktherabbit
Topic: 357 Message: 358

Hi John,

Glad your having fun

Sounds like the terminals on your battery box my be a touch corroded/oxidised? A quick go over with a PCB rubber or a fibreglass pencil will clean them up nicely. Im not sure what the terminals are like, but its also possible they are just not making a great contact, and perhaps need a little tightening/adjusting?

Martin

--- In electrichandbag@yahoogroups.com, "jswarbrick@..." <jswarbrick@...> wrote:
>
> Hi,
>
> Well after a wee wait 'my' 290 arrived and I took it away with us over the easter break. I have had some good fun working pedestrian portable into the local repeaters using the c cell battery pack and the standard rubber ducky antenna.
>
> I also had some fun tonight working into a 2m SSB net that we got together with a few QSO's to folk atound my home QTH here in Hamilton.
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> So I made my first 2m SSB QSO...
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> All in all I'm having fun.. Only 1 thing if the battery box is flexed slightly the rig cut off and you have to switch the rig off unmount the battery box remount and then switch on again.. Odd anyone got any ideas on this??
>
> 73
>
> John
>

359. Re: Easter Break with the FT 290 R II

Yahoo group: electrichandbag
Date: 2011-04-26 15:14:34 UTC
From: kf7bsf
Topic: 357 Message: 359

John,

Martin's advice is "spot on" and you can also adjust the clips to get a more secure fit of the battery box as well. I have 3 battery boxes and discovered one of mine was slightly warped requiring a bit more tension to get a solid fit.

Gene/KF7BSF

--- In electrichandbag@yahoogroups.com, "zaktherabbit" <barfield673@...> wrote:
>
> Hi John,
>
> Glad your having fun
>
> Sounds like the terminals on your battery box my be a touch corroded/oxidised? A quick go over with a PCB rubber or a fibreglass pencil will clean them up nicely. Im not sure what the terminals are like, but its also possible they are just not making a great contact, and perhaps need a little tightening/adjusting?
>
>
> Martin
>
> --- In electrichandbag@yahoogroups.com, "jswarbrick@" <jswarbrick@> wrote:
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> > Hi,
> >
> > Well after a wee wait 'my' 290 arrived and I took it away with us over the easter break. I have had some good fun working pedestrian portable into the local repeaters using the c cell battery pack and the standard rubber ducky antenna.
> >
> > I also had some fun tonight working into a 2m SSB net that we got together with a few QSO's to folk atound my home QTH here in Hamilton.
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> > So I made my first 2m SSB QSO...
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> > All in all I'm having fun.. Only 1 thing if the battery box is flexed slightly the rig cut off and you have to switch the rig off unmount the battery box remount and then switch on again.. Odd anyone got any ideas on this??
> >
> > 73
> >
> > John
> >
>

360. 290 mk1 SLAB battery mod?

Yahoo group: electrichandbag
Date: 2011-04-28 12:13:14 UTC
From: zaktherabbit
Topic: 360 Message: 360

Im considering changing the C-cell NiCds and tray in my mk1 for a suitable 12v Sealed Lead Acid Battery (SLAB). The reason for this is that all my other battery supplies are of this type (ranging from 7Ahr to 38Ahr!), so it makes sense to change and use the same charger system (also makes adding solar power for field use a doddle).

Before i go stripping the rig, has anyone else on the group done this already? It would be easier if i could find out from someone whos already done it what spec/size battery to use, save me trolling through Yuasa's website looking at specs.

Martin

361. Re: Hi New Member/SOTA

Yahoo group: electrichandbag
Date: 2011-04-28 12:17:23 UTC
From: zaktherabbit
Topic: 347 Message: 361

Sounds like the perfect excuse to contact SOTA and organise a NZ branch! ;-)

Im also a SOTA activator, although not as prolific a goat as some. Im hoping to get on one or two hills this coming week to make use of the royal wedding callsign NoV.

Incidentally, i use a fibreglass fishing pole as a SOTA mast, its 10m long but has to be used lower (thicker sections) for VHF beams etc, but its incredibly versatile. Theres a photo of my bungee guying system in the photos section

Martin

--- In electrichandbag@yahoogroups.com, "John Swarbrick" <jswarbrick@...> wrote:
>
> Hi Geoff,
>
>
>
> Thanks for the welcome...
>
>
>
> I have had a good look at SOTA. While we have some good hills and mountains
> here in NZ we do not have a SOTA association. Go Figure!!
>
>
>
> Anyhow thanks for the advice.
>
>
>
> Cheers
>
>
>
> John

362. Re: Component layout diagrams - junk set request

Yahoo group: electrichandbag
Date: 2011-04-28 12:19:23 UTC
From: zaktherabbit
Topic: 335 Message: 362

My offer still stands to organise this if anyone does have a dead/junk set to offer.

It would take me quite some time, but we would then have a complete guide to what parts are where

M

--- In electrichandbag@yahoogroups.com, "zaktherabbit" <barfield673@...> wrote:
>
> Unfortunately, the photograph in the manual is the only layout anyone has found.
>
> I would create a full diagram if i could get hold of a scrap set to dismantle and map, but so far i havent been able to do this.
>
> Im afraid the only way is to locate the parts using a multimeter and eyesight!
>
>

363. FT-290RII mods

Yahoo group: electrichandbag
Date: 2011-04-28 17:10:47 UTC
From: rfload
Topic: 363 Message: 363

Hi All,

Is there a way to modify the FT-290RII frequency range from 144 - 146 MHz to 144 - 148 MHz ?

Thanks
Muliawan
YD1BQV

364. Re: FT-290RII mods

Yahoo group: electrichandbag
Date: 2011-04-28 21:15:31 UTC
From: zaktherabbit
Topic: 363 Message: 364

Take a look in the files section, theres a file called 'all possible mods' or something similar, the frequency range mods are in there

Martin G7MRV

--- In electrichandbag@yahoogroups.com, "rfload" <rfload@...> wrote:
>
> Hi All,
>
> Is there a way to modify the FT-290RII frequency range from 144 - 146 MHz to 144 - 148 MHz ?
>
> Thanks
> Muliawan
> YD1BQV
>

365. Back up battery

Yahoo group: electrichandbag
Date: 2011-04-28 21:05:34 UTC
From: David
Topic: 365 Message: 365

I have found the back up battery has run down, giving intermittent tuning action. Does anyone know how to buy a new one? It is a button cell with two solder lugs. Thanks.
73
Dave
G3PVH

366. Re: Back up battery

Yahoo group: electrichandbag
Date: 2011-04-29 11:35:45 UTC
From: dbztuzujdhgtrjzthxh
Topic: 365 Message: 366

Hi Dave,
you can buy an exact replacement, but they can be hard to come by and often have sat on a shelf for some time.
An easy alternative is to fit a socket and use a common cell (CR2025) used on PC motherboards (the socket can be easily salvaged from an old motherboard too).
I can upload some pics if you want to know just how easy it is.

ian.

--- In electrichandbag@yahoogroups.com, "David" <curlew5878@...> wrote:
>
> I have found the back up battery has run down, giving intermittent tuning action. Does anyone know how to buy a new one? It is a button cell with two solder lugs. Thanks.
> 73
> Dave
> G3PVH
>

367. Re: [electrichandbag] Back up battery

Yahoo group: electrichandbag
Date: 2011-04-28 22:28:19 UTC
From: Andrew Davis
Topic: 365 Message: 367

Hi Dave,

I had that problem in mine too.

I could not find an equivalent type with solder lugs in the right places. For a very small cost, less than the value of the cells themselves, I bought a cell holder and soldered that into the board. I can now swap a new cell into the radio without any soldering. I did have to drill a hole in the board to take one of the pins on the holder, but that's all. And the plain cells that are used in other devices (CR2025?) are readily available.

This process required the board to be moved slightly out of its normal position to allow safe drilling and to allow access to the reverse side of the board. Let me know if you need any other info about how to install the holder.

Having used the radio for a few years without memory backup it is still a thing of great wonder to turn it on and find VFO A and B still on the previous frequencies and to find the memory frequencies are still correct. I use mine as an IF for 13 and 9 cm, one requiring 144 and the other requiring 147 so having those frequencies in the two vfos is very convenient.

73

Andrew Davis
VK1DA Canberra --- VK2UH Yass
web:vk1da.info, vkfaq.ampr.org

From: David <curlew5878@...>
To: electrichandbag@yahoogroups.com
Sent: Fri, 29 April, 2011 7:05:34 AM
Subject: [electrichandbag] Back up battery

I have found the back up battery has run down, giving intermittent tuning action. Does anyone know how to buy a new one? It is a button cell with two solder lugs. Thanks.
73
Dave
G3PVH

368. Re: Back up battery

Yahoo group: electrichandbag
Date: 2011-04-29 19:54:52 UTC
From: David
Topic: 365 Message: 368

Hi Ian and Andrew
Thank you very much for the advice. I will get a battery holder.
73
dave

369. Re: FTS-7 Mismatched connectors!

Yahoo group: electrichandbag
Date: 2011-05-07 05:30:19 UTC
From: kf7bsf
Topic: 221 Message: 369

Greetings All!

Though it's been a year since I've followed up on this issue, I do monitor the Group and enjoy that so many people are still enjoying the FT-290 series radios. I now have a set of 3 Mk 2's in 2m, 6m, & 70cm. I call it my tri-bander stack. Great little rigs!

I'm back to resolving the tone board issue in this email thread. I have a FTS-7a that I need to trade and/or modify for an earlier FTS-7 rig connector. If anyone has any suggestions I would appreciate any information I can get.

I may just break down and build an external tone board and even see if I can figure out a way to switch it between the 3 rigs, but I'm just poking to see what suggestions or trades might be out there.

Does anyone need an FTS-7a tone board?

73 de Gene/KF7BSF

--- In electrichandbag@yahoogroups.com, "kf7bsf" <kf7bsf@...> wrote:
>
> Kevin,
>
> That makes perfect sense. So I guess my question now is this: Did anyone make an adapter? If not I can try to work a trade I suppose to get the non-A model tone board.
>
> Thanks for a thorough response.
>
> Gene/KF7BSF
>
> --- In electrichandbag@yahoogroups.com, "Kevin" <rigeltoo@> wrote:
> >
> > Hello Gene
> >
> >
> > I think I might have the answer to your question. Amongst the paperwork the came with my new Mk2 today was a notice from Yaesu which dealt with the tone squelch units on the mk2. The notice said that due to the original connectors becoming prematurely obsolete Yaesu had to fit new ones that were not compatible. The units with the new connector were called FTS-7A
> >
> > The notice said to fit the FTS-7A to make sure that the last six digits in the serial number are above those listed below
> >
> > FT-290RII 300000
> > FT-690RII 290000
> > FT-790TII 140000

> >
> > Units with serial numbers below those listed need the original FTS-7.
> >
> > Hope this proves helpful
> >
> > Best regards
> >
> > Kevin G6UCY
> >
> > --- In electrichandbag@yahoogroups.com, "kf7bsf" <kf7bsf@> wrote:
> > >
> > > Had planned to install the FTS-7 Tone Board in my FT-690RII today, but discovered that the connector in the radio is different than that on the tone board.
> > >
> > > Has anyone encountered this?
> > >
> > > Looking at the tone board, it has the same connector as my FT-290RII with the tapered corners on the IC side of the connector. I was under the impression that these unit take the same FTS-7 Tone Board.
> > >
> > > The FT-690RII has a rectangular connector with all the pins that slide "across" each other, while the Tone Board has pins that insert "into" the cable connector.
> > >
> > > Any clues would be helpful.
> > >
> > > 73 de Gene/KF7BSF
> > >
> >
>

371. Re: Looking an FT-790 mk2 Technical Manual

Yahoo group: electrichandbag
Date: 2011-05-07 05:33:52 UTC
From: kf7bsf
Topic: 288 Message: 371

Back again!

I still would like to obtain a technical manual for the 790 Mk2 & 690Mk2. Anyone have any resources on these?

73 de Gene/KF7BSF

--- In electrichandbag@yahoogroups.com, "kf7bsf" <kf7bsf@...> wrote:
>
> Greetings All,
>
> I'm still trying to locate a tech supplement for the 790 mk2. I have the supplement for a 290 mk2 but the difference are substantial. I am willing to buy a manual, pay for scans (high quality) or whatever. My searches have turned up lots of mk1 stuff, but that's it.
>
> 73 de Gene/KF7BSF
>

372. Mk2 Battery Box

Yahoo group: electrichandbag
Date: 2011-05-07 05:40:16 UTC
From: kf7bsf
Topic: 372 Message: 372

Greetings Mk 2 fans!

I recently inventoried my Mk 2 gear and discovered I have a spare battery box. If anyone needs one send me a PM.

I'm uncertain of the policy on making such an announcement, so if the moderators need to delete this post I'll understand.

73 de Gene/KF7BSF

373. Re: FTS-7 Mismatched connectors!

Yahoo group: electrichandbag
Date: 2011-05-09 01:59:50 UTC
From: kf7bsf
Topic: 221 Message: 373

UPDATE!!!

After looking into the tone board connector a bit further, it is NOT the tone board that is the issue, but the connector inside the radios. My 2m has the correct connector and my 6m and .70cm rigs have the newer connectors.

SO!!!

Looks like I need to salvage a couple of connectors from some parts rigs. Anyone out there collecting parts rigs? I have given up on find a supplier for the original parts and may update the board and harness connectors, but I'm more hesitant to change the board connector.

Again any information would be appreciated. I'm sure someone out there has or knows something.

Gene/KF7BSF

--- In electrichandbag@yahoogroups.com, "kf7bsf" <kf7bsf@...> wrote:
>
> Greetings All!
>
> Though it's been a year since I've followed up on this issue, I do monitor the Group and enjoy that so many people are still enjoying the FT-290 series radios. I now have a set of 3 Mk 2's in 2m, 6m, & 70cm. I call it my tri-bander stack. Great little rigs!
>
> I'm back to resolving the tone board issue in this email thread. I have a FTS-7a that I need to trade and/or modify for an earlier FTS-7 rig connector. If anyone has any suggestions I would appreciate any information I can get.
>
> I may just break down and build an external tone board and even see if I can figure out a way to switch it between the 3 rigs, but I'm just poking to see what suggestions or trades might be out there.
>
> Does anyone need an FTS-7a tone board?
>
> 73 de Gene/KF7BSF
>
> --- In electrichandbag@yahoogroups.com, "kf7bsf" <kf7bsf@> wrote:
> >
> > Kevin,
> >
> > That makes perfect sense. So I guess my question now is this: Did anyone make an adapter? If not I can try to work a trade I suppose to get the non-A model tone board.
> >
> > Thanks for a thorough response.

> >
> > Gene/KF7BSF
> >
> > --- In electrichandbag@yahoogroups.com, "Kevin" <rigeltoo@> wrote:
> > >
> > > Hello Gene
> > >
> > >
> > > I think I might have the answer to your question. Amongst the paperwork the came with my new Mk2 today was a notice from Yaesu which dealt with the tone squelch units on the mk2. The notice said that due to the original connectors becoming prematurely obsolete Yaesu had to fit new ones that were not compatible. The units with the new connector were called FTS-7A
> > >
> > > The notice said to fit the FTS-7A to make sure that the last six digits in the serial number are above those listed below
> > >
> > > FT-290RII 300000
> > > FT-690RII 290000
> > > FT-790TII 140000
> > >
> > > Units with serial numbers below those listed need the original FTS-7.
> > >
> > > Hope this proves helpful
> > >
> > > Best regards
> > >
> > > Kevin G6UCY
> > >
> > > --- In electrichandbag@yahoogroups.com, "kf7bsf" <kf7bsf@> wrote:
> > > >
> > > > Had planned to install the FTS-7 Tone Board in my FT-690RII today, but discovered that the connector in the radio is different than that on the tone board.
> > > >
> > > > Has anyone encountered this?
> > > >
> > > > Looking at the tone board, it has the same connector as my FT-290RII with the tapered corners on the IC side of the connector. I was under the impression that these unit take the same FTS-7 Tone Board.
> > > >
> > > > The FT-690RII has a rectangular connector with all the pins that slide "across" each other, while the Tone Board has pins that insert "into" the cable connector.
> > > >
> > > > Any clues would be helpful.
> > > >
> > > > 73 de Gene/KF7BSF
> > > >
> > >
> > >
> >

374. Power Problems?

Yahoo group: electrichandbag
Date: 2011-05-12 08:16:20 UTC
From: kf7bsf
Topic: 374 Message: 374

Group,

I have amassed a trio of ft-x90RII radios. I'm hooked on these things. What great little rigs. I have been using my FT-290RII as a base station for about 1 year and it's a treat. I have the FL-2025 amp and get about 3w on low power and 25w on high power. I use it regularly on the repeaters and the high power gets me respectable ssb use on the local net. The only real shortcoming is the single pl-tone limit without taking the amp off.

However, I recently got my 70cm 790 on the air and though I could hit the local repeater just fine, the power output is extremely low. With the FL-7025 amp, I'm showing about 1w on low power and a little over 1.5w on high power. I've double checked all my connectors between the amp and the ps, but no difference. I tested the unit in cw mode directly into a dummy load with no change.

To add to the puzzle, my 6m 690 rig with the FL-6020 is exhibiting the same low power readings under the same circumstances.

My next test will be to remove the amps and test the rf output using the battery pack to determine if the base unit is producing the expected 2.5w on high power. That would help eliminate an amp vs. rig problem. I also plan to repeat the tests using my clubs calibrated meter as well.

My question is this, are there know issues that I should be looking for as I track down this power output problem?

I would appreciate any insights anyone could share regarding this. This is the only place I know of to ask these questions.

73 Gene/KF7BSF

375. New file uploaded to electrichandbag

Yahoo group: electrichandbag
Date: 2011-05-18 06:47:43 UTC
From: electrichandbag@yahoogroups.com
Topic: 2 Message: 375

Hello,

This email message is a notification to let you know that
a file has been uploaded to the Files area of the electrichandbag
group.

File : /FT790R_user_it.pdf
Uploaded by : ndrngl2004 <angeloandreoletti@...>
Description : the 70 cm handbag manual in italian

You can access this file at the URL:
http://groups.yahoo.com/group/electrichandbag/files/FT790R_user_it.pdf

To learn more about file sharing for your group, please visit:
http://help.yahoo.com/l/us/yahoo/groups/original/members/web/index.html
Regards,

ndrngl2004 <angeloandreoletti@...>

376. Usual AGC desensing fault - successful fix

Yahoo group: electrichandbag
Date: 2011-05-18 20:01:27 UTC
From: GM8BJF
Topic: 376 Message: 376

The FT290R Mk1 that I use for Microwave portable operation as an IF radio has been showing the ususal desensing due to the AGC voltage rising and pushing the S meter full scale in the absence of a signal.
The fault only came on when out /P and when the weather was cold which is normal in GM.

Back home (in the warm)the radio was fine. I could induce the fault with a can of freezer spray applied around the area of Q1014 and D1028 - 30. After a bit of floundering around replacing components in that area to no avail, I did the Mod described by G3LLL, adding a 47k resistor between the base and emitter of Q1014 and it seems to have effected a cure. The radio can now be left in the domestic enviromental test chamber (aka refrigerator) overnight and comes out working fine in the morning.

I feel sure that it was a bit of dodgey design on Yaesu's part not to have a load resistor on the output of the AGC rectifiers and simply depend on the transistor base current to load the diodes. I am not sure quite why it only shows with age, but I suppose that as they are all at least 25 years old now and entitled to be a bit dicky!

Hope that is of some use,

73s

Brian, GM8BJF.

377. Re: [electrichandbag] Usual AGC desensing fault - successful fix

Yahoo group: electrichandbag
Date: 2011-05-19 01:42:44 UTC
From: Andrew Davis
Topic: 376 Message: 377

Brian

Thanks for posting that result, it is good to know of that cure though mine has yet to display the problem. Must admit I tend not to operate often at 2C and lower but it does happen sometimes in the morning on field day at 1800m.

Regarding Yaesu's design, I am frankly amazed that these radios are still operating at all, given my experiences with other gear of that era and earlier. Getting it to work from one year to the next was sometimes an achievement. The fT2FB fm mobile used to be inoperative most of the winter mornings until I was half way to work, possibly due to negative C temps. Would have been useless in your climate...

73

Andrew Davis
VK1DA Canberra --- VK2UH Yass
web:vk1da.info, vkfaq.ampr.org

From: GM8BJF <brian.flynn@...>
To: electrichandbag@yahoogroups.com
Sent: Thursday, 19 May 2011 6:01 AM
Subject: [electrichandbag] Usual AGC desensing fault - successful fix

The FT290R Mk1 that I use for Microwave portable operation as an IF radio has been showing the ususal desensing due to the AGC voltage rising and pushing the S meter full scale in the absence of a signal.
The fault only came on when out /P and when the weather was cold which is normal in GM.

Back home (in the warm)the radio was fine. I could induce the fault with a can of freezer spray applied around the area of Q1014 and D1028 - 30. After a bit of floundering around replacing components in that area to no avail, I did the Mod described by G3LLL, adding a 47k resistor between the base and emitter of Q1014 and it seems to have effected a cure. The radio can now be left in the domestic enviromental test chamber (aka refrigerator) overnight and comes out working fine in the morning.

I feel sure that it was a bit of dodgey design on Yaesu's part not to have a load resistor on the output of the AGC rectifiers and simply depend on the transistor base current to load the diodes. I am not sure quite why it only shows with age, but I suppose that as they are all at least 25 years old now and entitled to be a bit dicky!

Hope that is of some use,

73s

Brian, GM8BJF.

378. Re: Back up battery

Yahoo group: electrichandbag
Date: 2011-05-19 20:34:39 UTC
From: David
Topic: 365 Message: 378

many thanks to everyone, rig working again fine. What a miracle.
73
dave

379. spare mic wanted

Yahoo group: electrichandbag
Date: 2011-06-16 19:44:36 UTC
From: Jim
Topic: 379 Message: 379

Hi, does any one have a spare/unwanted YM-47 mic that they would be willing to part with if so contact me by my email. yours jim G1ASN

380. Where to mod the board for AGC fault - Meter hard over.

Yahoo group: electrichandbag
Date: 2011-06-19 02:53:41 UTC
From: ZL1SWW
Topic: 380 Message: 380

Hi All,

I decided to have a look at my FT290 again after it had the meter at FSD for half an hour when I tried to have a contact on my 3.4GHz transverter as my FT-817 was running on 1296.

This was getting frustrating so dug inside to do the AGC mod. Didn't have 47k SMD resistor on hand so used a 56k. It works OK.

As this radio is such a pig to service, I decided to take some photos with the thought it might benefit others. Using a bright light and the pace desolderer, I could identify the pads.

I have pushed up a folder with 3 photos of the relevent details. I use SMD as it will not foul the battery case and like SMD anyway.

Look for the "AGC FAULT MODS" folder in the files area.

Cheers,

Simon
ZL1SWW

381. AGC FAULT ON 790 MK1

Yahoo group: electrichandbag
Date: 2011-06-21 16:34:28 UTC
From: Jim
Topic: 381 Message: 381

Hi I have a 790 mk1 with I think the same problem the power meter is hard over to full deflection when I switch on would this be an AGC fault?. I have a picture of the possible point on the underside of the circuit board and I will load it up into the photos section of the electric handbag site as ''AGC FAULT ON 790 MK1'', I would be glad of your input and advice yours 73 jim G1ASN

382. Re: AGC FAULT ON 790 MK1

Yahoo group: electrichandbag
Date: 2011-06-25 07:34:38 UTC
From: ndrngl2004
Topic: 381 Message: 382

Ciao jim,
my 790 was in similar condition display off, meter at the end of the scale, no audio.
I turn on the display with new caps in the vr 1012 zone and adjusting it for 5,7 V on the catode of diode 1060 just on it's side. the meter and the display are now normal and I can listen a noise of a frie pan for a wile and the silence come again. the noise came bach if I leave the radio off for a wile. then the tragedy :-))))))). I attempt to repair in the late evening and I was so tired also because it a pain in the *** to work in this area. I can't even belive how I can do it but I detach the black wire soldered on the shield visible in your photo and i cant recognize were it was soldered!!! if you have the radio still open please tell me were I have to put it!

73 de Angelo iz0tut

--- In electrichandbag@yahoogroups.com, "Jim" <stansfield84@...> wrote:
>
> Hi I have a 790 mk1 with I think the same problem the power meter is hard over to full deflection when I switch on would this be an AGC fault?. I have a picture of the possible point on the underside of the circuit board and I will load it up into the photos section of the electric handbag site as ''AGC FAULT ON 790 MK1'', I would be glad of your input and advice yours 73 jim G1ASN
>

383. UK Service / Alignment?

Yahoo group: electrichandbag
Date: 2011-07-04 08:54:04 UTC
From: Michael
Topic: 383 Message: 383

Does anyone know of somewhere in the UK that I can get
one of these rigs serviced / realigned? I've acquired a
Tokyo VHF->HF transverter and want to use it for HF PSK31
but there is a fair RX/TX frequency split at the moment.

TIA

Mike

385. Re: UK Service / Alignment?

Yahoo group: electrichandbag
Date: 2011-07-04 12:02:47 UTC
From: GD1MIP
Topic: 383 Message: 385

Mike Castle get lots of good feedback. but if your in the NW of England try Harry Leeming (contact details in PW)

Andy
GD1MIP

386. ft 290r

Yahoo group: electrichandbag
Date: 2011-07-10 11:06:36 UTC
From: Anthony
Topic: 386 Message: 386

My 290 has gone deaf on usb & cw,lsb & fm are ok, anybody has any idea,

Thanks in advance Tony.

387. Re: ft 290r

Yahoo group: electrichandbag
Date: 2011-07-10 16:48:56 UTC
From: zaktherabbit
Topic: 386 Message: 387

Tony, has the S-meter peaked out as well?

Martin G7MRV

--- In electrichandbag@yahoogroups.com, "Anthony" <g1rsffr@...> wrote:
>
> My 290 has gone deaf on usb & cw,lsb & fm are ok, anybody has any idea,
>
> Thanks in advance Tony.
>

388. Digital Modes?, was: Re: UK Service / Alignment?

Yahoo group: electrichandbag
Date: 2011-07-11 07:40:18 UTC
From: Michael
Topic: 383 Message: 388

Thanks for the replies, now for the next question :-)

Has anyone used these rigs for digital modes?

The reason I ask is I have a Tokyo HF transverter
teamed up with the 290, and it works extremely well
on PSK31 for receive, but I'm having difficulty
actually getting QSO's. My suspicion is the modulation, as
adjusting the volume of the drive is giving me an 'all or
nothing' response on the power/swr meter. Any advice for
digital with the venerable beasty?

By the way, I have attempted to check by listening with
a second receiver, but even with a dummy load, it completely
overloads the front end.

cheers

Mike G8LKD

--- In electrichandbag@yahoogroups.com, "GD1MIP" <gd1mip@...> wrote:
>
> Mike Castle get lots of good feedback. but if your in the NW of England try Harry Leeming (contact details in PW)
>
>
> Andy
> GD1MIP
>

389. Re: [electrichandbag] ft 290r

Yahoo group: electrichandbag
Date: 2011-07-11 07:34:55 UTC
From: Andrew Davis
Topic: 386 Message: 389

Tony,

I think you are saying that it is deaf on usb & cw, whereas lsb and FM are ok.

Idea:

The USB and CW modes share a common bfo crystal. LSB has a different one, and FM brings in the FM IF without any BFO needed.

I therefore would check for signal from the BFO if you:

a. can locate it on the board

b. have a receiver or other suitable test gear to check its signal and frequency.

You should find that there is a signal from the BFO on LSB mode, but perhaps none on USB and CW. There should not be one on FM either.

Look at the circuit and see whether a failure of the BFO on USB/CW may mean a component has gone faulty in the oscillator - I would suspect an electrolytic capacitor bypassing the supply voltage, or possibly a bias resistor or the active device itself. The last thing I think would cause this would be a faulty crystal but that could happen.

73

Andrew Davis
VK1DA Canberra --- VK2UH Yass
web:vk1da.info, vkfaq.ampr.org

From: Anthony <g1rsffr@...>
To: electrichandbag@yahoogroups.com
Sent: Sunday, 10 July 2011 9:06 PM
Subject: [electrichandbag] ft 290r

My 290 has gone deaf on usb & cw,lsb & fm are ok, anybody has any idea,

Thanks in advance Tony.

390. Re: ft 290r

Yahoo group: electrichandbag
Date: 2011-07-11 12:17:00 UTC
From: Anthony
Topic: 386 Message: 390

OK Andrew i'll check the bfo & xtal,I thought it might be the xtal but at least I no where to look now,its not completely deaf just a higher pitched hiss plus muted sound,thanks for your help
Tony
--- In electrichandbag@yahoogroups.com, Andrew Davis <andrew73@...> wrote:
>
> Tony,
>
> I think you are saying that it is deaf on usb & cw, whereas lsb and FM are ok.
>
> Idea:
>
> The USB and CW modes share a common bfo crystal.Â LSB has a different one, and FM brings in the FM IF without any BFO needed.
>
> I therefore would check for signal from the BFO if you:
>
> a. can locate it on the board
>
> b. have a receiver or other suitable test gear to check its signal and frequency.
>
> You should find that there is a signal from the BFO on LSB mode, but perhaps none on USB and CW.Â Â Â There should not be one on FM either.
>
>
> Look at the circuit and see whether a failure of the BFO on USB/CW may mean a component has gone faulty in the oscillator - I would suspect an electrolytic capacitor bypassing the supply voltage, or possibly a bias resistor or the active device itself.Â The last thing I think would cause this would be a faulty crystal but that could happen.
>
> 73
>
>
> _____
> Andrew Davis
> VK1DA Canberra --- VK2UH Yass
> web:vk1da.info, vkfaq.ampr.org
>
>
> _____
> From: Anthony <g1rsffr@...>
> To: electrichandbag@yahoogroups.com
> Sent: Sunday, 10 July 2011 9:06 PM
> Subject: [electrichandbag] ft 290r
>

>
> Â
> My 290 has gone deaf on usb & cw,lsb & fm are ok, anybody has any idea,
>
> Thanks in advance Tony.
>

391. Re: ft 290r

Yahoo group: electrichandbag
Date: 2011-07-11 12:21:29 UTC
From: Anthony
Topic: 386 Message: 391

No just much higher pitched hiss & muted audio
Thanks for help
Tony

--- In electrichandbag@yahoogroups.com, "zaktherabbit" <barfield673@...> wrote:
>
> Tony, has the S-meter peaked out as well?
>
>
> Martin G7MRV
>
> --- In electrichandbag@yahoogroups.com, "Anthony" <g1rsffr@> wrote:
> >
> > My 290 has gone deaf on usb & cw,lsb & fm are ok, anybody has any idea,
> >
> > Thanks in advance Tony.
> >
>

392. Re: ft 290r

Yahoo group: electrichandbag
Date: 2011-07-11 16:03:57 UTC
From: zaktherabbit
Topic: 386 Message: 392

ok, in that case then i would also go with Andrews opinion. Mine was originally off on one of the sidebands (cant remember which) and needed the BFO aligning. The symptoms for that were higher pitch noise, although i dont recall the effect on sensitivity

Martin G7MRV

--- In electrichandbag@yahoogroups.com, "Anthony" <g1rsffr@...> wrote:
>
> No just much higher pitched hiss & muted audio
> Thanks for help
> Tony
>
> --- In electrichandbag@yahoogroups.com, "zaktherabbit" <barfield673@> wrote:
> >
> > Tony, has the S-meter peaked out as well?
> >
> >
> > Martin G7MRV
> >
> > --- In electrichandbag@yahoogroups.com, "Anthony" <g1rsffr@> wrote:
> > >
> > > My 290 has gone deaf on usb & cw,lsb & fm are ok, anybody has any idea,
> > >
> > > Thanks in advance Tony.
> > >
> > >
>

393. Charging connector for FT290R II specs?

Yahoo group: electrichandbag
Date: 2011-09-08 21:21:35 UTC
From: gsmendelson
Topic: 393 Message: 393

I have an FT290R mark II with the battery pack. The battery pack has 2 sockets on the side for power. One is a large one to power the radio, the small one under it is to charge the batteries.

Looking at the schematic, if you put a plug into the charge socket it disconnects the batteries from the radio and you can safely charge the batteries in place.

Being a 1995 vintage radio, it was designed for ni-cads and was just a low current power supply. It would charge the batteries in about 12 hours and if you removed it within 3 days, not cook the batteries.

I no longer have the charger. In the pack I have 2500 mAh nickle metal hydride AA cells in sleeves. This give me a lot more power than the C sized ni-cads I used to have.

I charge them with a smart charger that shuts off when it detects the cells are charged, so they are safe without a thermal cut-off.

BUT (there's always a but, isn't there) I can't find a plug that will fit the charge socket. So for now, I remove the battery pack from the radio and connect crocodile clips to the round holes on the top of it to charge it. I've tried several different plugs that "fit", some never make contact to the center pin, some contact the center pin, but not the outside.

Most are just too big.

So if you are still reading this and have the proper charger, would you please measure the diameter of the hole in the middle and the outside of it?

Thanks in advance,

Geoff.
Geoff Mendelson 4X1GM/N3OWJ

394. Re: Charging connector for FT290R II specs?

Yahoo group: electrichandbag
Date: 2011-09-11 12:42:23 UTC
From: barrycrossley@ymail.com
Topic: 393 Message: 394

Geoff

I recently purchased a second hand FT290R mkII without a battery box or charger. I managed to locate a brand new battery box but still no charger, so ended up buying a new specialist nicad charger. The plug that came with the charger was of course the wrong size.

I managed to find an old power adaptor with multiple plugs and one of these fitted. The outside diameter is 4mm but I am having trouble measuring the centre pin diameter - it seem to be 1.5mm.

Watch out for polarity though, it is centre negative.

Hope this helps.

Barry
M1CHF

--- In electrichandbag@yahoogroups.com, "gsmendelson" <geoffreymendelson@...> wrote:
>
> I have an FT290R mark II with the battery pack. The battery pack has 2 sockets on the side for power. One is a large one to power the radio, the small one under it is to charge the batteries.
>
> Looking at the schematic, if you put a plug into the charge socket it disconnects the batteries from the radio and you can safely charge the batteries in place.
>
> Being a 1995 vintage radio, it was designed for ni-cads and was just a low current power supply. It would charge the batteries in about 12 hours and if you removed it within 3 days, not cook the batteries.
>
> I no longer have the charger. In the pack I have 2500 mAh nickle metal hydride AA cells in sleeves. This give me a lot more power than the C sized ni-cads I used to have.
>
> I charge them with a smart charger that shuts off when it detects the cells are charged, so they are safe without a thermal cut-off.
>
> BUT (there's always a but, isn't there) I can't find a plug that will fit the charge socket. So for now, I remove the battery pack from the radio and connect crocodile clips to the round holes on the top of it to charge it. I've tried several different plugs that "fit", some never make contact to the center pin, some contact the center pin, but not the outside.
>
> Most are just too big.
>
> So if you are still reading this and have the proper charger, would you please measure the diameter of the hole in the middle and the outside of it?

>
> Thanks in advance,
>
> Geoff.
> Geoff Mendelson 4X1GM/N3OWJ
>

395. Re: 290 mk1 SLAB battery mod?

Yahoo group: electrichandbag
Date: 2011-09-27 07:23:05 UTC
From: Robert
Topic: 360 Message: 395

Hi Martin

> Im considering changing the C-cell NiCds and tray in my mk1 for a suitable 12v Sealed Lead Acid Battery (SLAB). >

An older thread but myself and a friend have been considering doing the same sort of mod. Did you press on with it and if so how did it work?
Rob

396. Swapping Mutek to another rig?

Yahoo group: electrichandbag
Date: 2011-09-27 07:28:11 UTC
From: Robert
Topic: 396 Message: 396

I have a non Mutek 290r in good condition and a friend has passed me his 290r to take the Mutek board out and transfer to mine (on the basis his FT290 only gets used to monitor the local repeater). Only slight concern is the instructions for the install suggest some mods carried out when installing the Mutek may not be that straightforward to reverse. Has anyone taken out a Mutek board from a FT290r so the donor remains viable or is this going to give some problems in re-commissioning? I have not started work on this yet and its highly likely opening up both rigs and doing a side by side comparison will reveal a few clues but it seemed to make sense to ask for some input first!!

Rob MJ0RZD

397. Antenna required

Yahoo group: electrichandbag
Date: 2011-09-27 11:23:51 UTC
From: rpcrichton
Topic: 397 Message: 397

Hi Group I have 2 immaculate ft 290r one mutec on Sunday I was on a raynet duty when the wind blew the 290 off its picnic table and snapped the original telescopic antenna , does perchance anybody have a spare for sale or know where I may get one.

best 73s Paul m1bpt

398. Re: Swapping Mutek to another rig?

Yahoo group: electrichandbag
Date: 2011-09-27 12:06:11 UTC
From: gi0gdp
Topic: 396 Message: 398

--- In electrichandbag@yahoogroups.com, "Robert" <robialbion@...> wrote:
>
> I have a non Mutek 290r in good condition and a friend has passed me his 290r to take the Mutek board out and transfer to mine (on the basis his FT290 only gets used to monitor the local repeater). Only slight concern is the instructions for the install suggest some mods carried out when installing the Mutek may not be that straightforward to reverse. Has anyone taken out a Mutek board from a FT290r so the donor remains viable or is this going to give some problems in re-commissioning? I have not started work on this yet and its highly likely opening up both rigs and doing a side by side comparison will reveal a few clues but it seemed to make sense to ask for some input first!!
>
> Rob MJ0RZD
>
Do you need the original fitting instructions?
Geoff

399. Re: Swapping Mutek to another rig?

Yahoo group: electrichandbag
Date: 2011-09-27 14:09:14 UTC
From: Michael
Topic: 396 Message: 399

I currently have two FT-290, and one Mutek, which isn't in either of them. Having reviewed the fitting instructions, I don't think I have the nerve to try it, so if anyone wants the board, please tell me. Alternatively, if anyone thinks they can fit this to one of my rigs for a reasonable fee, please tell me.

Mike

--- In electrichandbag@yahoogroups.com, "gi0gdp" <gi0gdp@...> wrote:
>
>
>
> --- In electrichandbag@yahoogroups.com, "Robert" <robialbion@> wrote:
> >
> > I have a non Mutek 290r in good condition and a friend has passed me his 290r to take the Mutek board out and transfer to mine (on the basis his FT290 only gets used to monitor the local repeater). Only slight concern is the instructions for the install suggest some mods carried out when installing the Mutek may not be that straightforward to reverse. Has anyone taken out a Mutek board from a FT290r so the donor remains viable or is this going to give some problems in re-commissioning? I have not started work on this yet and its highly likely opening up both rigs and doing a side by side comparison will reveal a few clues but it seemed to make sense to ask for some input first!!
> >
> > Rob MJ0RZD
> >
> Do you need the original fitting instructions?
> Geoff
>

400. Re: Swapping Mutek to another rig?

Yahoo group: electrichandbag
Date: 2011-09-27 15:10:33 UTC
From: zaktherabbit
Topic: 396 Message: 400

Rob,

Perhaps a simpler idea, if both rigs are in similar condition, would just be to swap the entire rig?

Martin G7MRV

--- In electrichandbag@yahoogroups.com, "Robert" <robialbion@...> wrote:
>
> I have a non Mutek 290r in good condition and a friend has passed me his 290r to take the Mutek board out and transfer to mine (on the basis his FT290 only gets used to monitor the local repeater). Only slight concern is the instructions for the install suggest some mods carried out when installing the Mutek may not be that straightforward to reverse. Has anyone taken out a Mutek board from a FT290r so the donor remains viable or is this going to give some problems in re-commissioning? I have not started work on this yet and its highly likely opening up both rigs and doing a side by side comparison will reveal a few clues but it seemed to make sense to ask for some input first!!
>
> Rob MJ0RZD
>

401. Re: Swapping Mutek to another rig?

Yahoo group: electrichandbag
Date: 2011-09-27 16:28:49 UTC
From: Robert
Topic: 396 Message: 401

Thanks for the feedback guys!

To answer the replies so far, swapping the rigs did cross my mind already but to be brutally honest the mutek rig is a bit rough (though swapping out the casing etc could make the difference), I suspect the 'spare' Mutek board would be sought after if you put it up for sale, last I saw one on ebay it went for about £70, I wouldn't insult your intelligence by saying something like 'send it over'!!!! ;o)

Thank you to Jim for the email and uploading the photos, this looks like an entertaining weekend project, time to get the lead solder out..., again!!!

73 de Rob MJ0RZD

402. Re: [electrichandbag] Re: Swapping Mutek to another rig?

Yahoo group: electrichandbag
Date: 2011-09-27 15:54:03 UTC
From: geoffrey mendelson
Topic: 396 Message: 402

On Sep 27, 2011, at 6:10 PM, zaktherabbit wrote:

>
> Rob,
>
> Perhaps a simpler idea, if both rigs are in similar condition, would
> just be to swap the entire rig?
>

Even better idea. Buy him a $35 (plus postage) BAOFENG.

73,

Geoff.

--
Geoffrey S. Mendelson, N3OWJ/4X1GM

403. FT-290R for sale + PYE Power supply + Mobile Mount

Yahoo group: electrichandbag
Date: 2011-10-07 13:29:46 UTC
From: siggi.ingason@gmail.com
Topic: 403 Message: 403

Hi,
I have a FT290R is very good condition with the original leather case, mike etc. I also have all the packing and instruction manual, circuit diagram and the NiCad charger NC-11C. The power supply is made by PYE and although old it's in good working order. The mobile mount has been stored in the garage and is in fair condition but again is in 100% working order.

At the moment this is not advertised anywhere else, but I will be placing it on other forums next week.

If anyone is interested in the lot, then let me know. If tyou want more details or if required I can send photos of the rig etc..
I'm looking for £115 + Postage (UK only).

Siggi (near Southampton)
siggi.ingason@...
G4/TF3SI

404. Re: 290R fault

Yahoo group: electrichandbag
Date: 2011-10-11 15:37:57 UTC
From: adrian_b_a
Topic: 292 Message: 404

--- In electrichandbag@yahoogroups.com, "hennessyben@..." <hennessyben@...> wrote:
>
> Has any one i fault in their 290 when the meter goes FSD on RX and has no output power on TX.
>
> Thanks
>
> Ben
>
> VK5TX
>
I bought 290 R on ebay earlier this year and it has recently developed the same fault taking longer and longer to get itself wroking every time i tried to use it. Looked at the posts and then looked inside rig and relised that changing electrolytics is not for someone as ham fisted as me. Prior to throwing the rig in bin I thought i'd try drying board with hair dryer and as if by magic the s meter dropped back to zero and everything started to work agin. Just had short qso on FM and ssb to check signal and all's well so
if all else fails take of top lid with 2 screw and apply hairdryer for a few min to the contents (I did it whilst powered up and I could see the s meter returning to zero).
Hope that helps fellow sufferes
kind regards
Adrian G4JGH

405. Re: [electrichandbag] Re: 290R fault

Yahoo group: electrichandbag
Date: 2011-10-11 18:23:23 UTC
From: Liviu Babi
Topic: 292 Message: 405

Sorry, have to say that changing capacitors it's the only and unique solution. Replace them with tantalum type.

I have done that and for now the problems were solved. This thing took me almost two complete weeks and not without adventures. Transceiver several times and have not started. Be very careful to the wires that cross the main unit, very easy to break.
FT290R is built in the 80s and it is difficult to do "surgery" on him. Several times I wanted to throw him to the ground or throw it away.

The hardest thing is to locate the capacitors on the pcb's back face, because it's nowhere to find a complete description of the main unit. There is no manual to contain details about the main unit. View my posts on the forum.
I wish you success, patience and good eyes

keep in touch

YO4FNG
Liviu

From: adrian_b_a <adrian_b_a@...>
To: electrichandbag@yahoogroups.com
Sent: Tuesday, October 11, 2011 6:37 PM
Subject: [electrichandbag] Re: 290R fault

--- In electrichandbag@yahoogroups.com, "hennessyben@..." <hennessyben@...> wrote:
>
> Has any one i fault in their 290 when the meter goes FSD on RX and has no output power on TX.
>
> Thanks
>
> Ben
>
> VK5TX
>
I bought 290 R on ebay earlier this year and it has recently developed the same fault taking longer and longer to get itself wroking every time i tried to use it. Looked at the posts and then looked inside rig and relised that changing electrolytics is not for someone as ham fisted as me. Prior to throwing the rig in bin I thought i'd try drying board with hair dryer and as if by magic the s meter dropped back to zero and everything started to work agin. Just had short qso on FM and ssb to check signal and all's well so
if all else fails take of top lid with 2 screw and apply hairdryer for a few min to the contents (I did it whilst powered up and I could see the s meter returning to zero).
Hope that helps fellow sufferes
kind regards

Adrian G4JGH

406. Re: [electrichandbag] Re: 290R fault

Yahoo group: electrichandbag
Date: 2011-10-11 18:55:24 UTC
From: Gordon JC Pearce
Topic: 292 Message: 406

On Tue, 11 Oct 2011 11:23:23 -0700 (PDT)
Liviu Babi <electronicguest@...> wrote:

> Sorry, have to say that changing capacitors it's the only and unique solution. Replace them with tantalum type.

It's probably better to replace them like-for-like, if you're going to replace them at all.

> I have done that and for now the problems were solved. This thing took me almost two complete weeks and not without adventures. Transceiver several times and have not started. Be very careful to the wires that cross the main unit, very easy to break.

For now, yes. I don't know why you'd replace perfectly okay electrolytics with horrible unreliable tantalum bead caps. You get about ten years out of them before they fail dead short...

> FT290R is built in the 80s and it is difficult to do "surgery" on him. Several times I wanted to throw him to the ground or throw it away.

The through-hole components are certainly awkward, crammed in like that. Fortunately I work on a lot of old gear and already had soldering iron tips in "oh you've got to be kidding" size. It's kind of fun though, feels a bit like being a blacksmith at a forge after working on normal-size surface mount stuff all day ;-)

--
Gordon JC Pearce MM0YEQ <gordonjcp@...>

407. Re: 290R fault

Yahoo group: electrichandbag
Date: 2011-10-11 19:12:32 UTC
From: GM8BJF
Topic: 292 Message: 407

I have a couplke of FT290R Mk1s I use as microwave IF radios. I had exactly this problem and found that the mod described by G3LLL was a good fix. I posted about this back in May. This is what I said at the time.

"The FT290R Mk1 that I use for Microwave portable operation as an IF radio has been showing the ususal desensing due to the AGC voltage rising and pushing the S meter full scale in the absence of a signal.
The fault only came on when out /P and when the weather was cold which is normal in GM.

Back home (in the warm)the radio was fine. I could induce the fault with a can of freezer spray applied around the area of Q1014 and D1028 - 30. After a bit of floundering around replacing components in that area to no avail, I did the Mod described by G3LLL, adding a 47k resistor between the base and emitter of Q1014 and it seems to have effected a cure. The radio can now be left in the domestic enviromental test chamber (aka refrigerator) overnight and comes out working fine in the morning.

I feel sure that it was a bit of dodgey design on Yaesu's part not to have a load resistor on the output of the AGC rectifiers and simply depend on the transistor base current to load the diodes. I am not sure quite why it only shows with age, but I suppose that as they are all at least 25 years old now and entitled to be a bit dicky!

Hope that is of some use,

73s"

Also if you search on G3LLL on this site you will find the original mod. I did have a go at changing caps but that was absolutely no use ofr me.

73s

Brian GM8BJF

--- In electrichandbag@yahoogroups.com, Gordon JC Pearce <gordon@...> wrote:
>
> On Tue, 11 Oct 2011 11:23:23 -0700 (PDT)
> Liviu Babi <electronicguest@...> wrote:
>
> > Sorry, have to say that changing capacitors it's the only and unique solution. Replace them with tantalum type.
>
> It's probably better to replace them like-for-like, if you're going to replace them at all.
>
> > I have done that and for now the problems were solved. This thing took me almost two

complete weeks and not without adventures. Transceiver several times and have not started. Be very careful to the wires that cross the main unit, very easy to break.
>
> *For now*, yes. I don't know why you'd replace perfectly okay electrolytics with horrible unreliable tantalum bead caps. You get about ten years out of them before they fail dead short...
>
> > FT290R is built in the 80s and it is difficult to do "surgery" on him. Several times I wanted to throw him to the ground or throw it away.
>
> The through-hole components are certainly awkward, crammed in like that. Fortunately I work on a lot of old gear and already had soldering iron tips in "oh you've got to be kidding" size. It's kind of fun though, feels a bit like being a blacksmith at a forge after working on normal-size surface mount stuff all day ;-)
>
> --
> Gordon JC Pearce MM0YEQ <gordonjcp@...>
>

408. Re: [electrichandbag] Re: 290R fault

Yahoo group: electrichandbag
Date: 2011-10-11 20:40:10 UTC
From: Gordon JC Pearce
Topic: 292 Message: 408

On Tue, 11 Oct 2011 19:12:32 -0000
"GM8BJF" <brian.flynn@...> wrote:

<snip>

> Also if you search on G3LLL on this site you will find the original mod. I did have a go at changing caps but that was absolutely no use ofr me.
>
> 73s
>
> Brian GM8BJF

Judging by the callsign you've been at it longer than I have, but in around 25 years of repairing electronic stuff I've replaced maybe half a dozen electrolytic capacitors. Two of them were very recently and clearly popped smoothing capacitors on a PC motherboard, and were the only ones I can say for certain were the only part at fault; the others were implicated but not exclusively to blame in various odd analogue faults.

In the interests of full disclosure I'd like to point out that I'm omitting the many, many dried-out electrolytics in Amstrad satellite receivers that I used to fix as a Saturday job at a TV repair place when I was at school. They were bloody horrible things and I'm not sad to see the back of them. There's a house with one of the old Astra 1 dishes still on it with the big AMSTRAD pink-and-white logo that I drive past on my way to work every morning, it still makes me shudder...

--
Gordon JC Pearce MM0YEQ <gordonjcp@...>

409. Re: [electrichandbag] Re: 290R fault

Yahoo group: electrichandbag
Date: 2011-10-11 21:22:36 UTC
From: Geoff Blake
Topic: 292 Message: 409

On 11 October 2011 21:40, Gordon JC Pearce <gordon@...> wrote:
> On Tue, 11 Oct 2011 19:12:32 -0000
> "GM8BJF" <brian.flynn@...> wrote:
>
> <snip>
>
>
>> Also if you search on G3LLL on this site you will find the original mod. I did have a go at changing caps but that was absolutely no use ofr me.
>>
>> 73s
>>
>> Brian GM8BJF
>
> Judging by the callsign you've been at it longer than I have, but in around 25 years of repairing electronic stuff I've replaced maybe half a dozen electrolytic capacitors. Two of them were very recently and clearly popped smoothing capacitors on a PC motherboard, and were the only ones I can say for certain were the only part at fault; the others were implicated but not exclusively to blame in various odd analogue faults.
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> In the interests of full disclosure I'd like to point out that I'm omitting the many, many dried-out electrolytics in Amstrad satellite receivers that I used to fix as a Saturday job at a TV repair place when I was at school. They were bloody horrible things and I'm not sad to see the back of them. There's a house with one of the old Astra 1 dishes still on it with the big AMSTRAD pink-and-white logo that I drive past on my way to work every morning, it still makes me shudder...

I would be careful. After a lifetime of working on professional test equipment (HP, Tek, MI, Wayne Kerr, Rohde & Schwarz, etc) I can tell you that certain types of aluminium electrolytics are prone to failure after 20 years or so. Faults may not be obvious, short circuits are rare, but leaky or major reduction in value are quite common. Similar applies to bead tantilums.

Frequently certain manufacturers equipment - not using the best of electrolytics - exhibited a serious drop in performance, but nothing you could put a finger on. A complete replacement of all electrolytics would often bring a miraculous improvement in performance.

No doubt the same will apply to the FT290.

73 Geoff G8GNZ

--
##
Geoff Blake, G8GNZ JO01fq: Chelmsford, Essex, UK

<geoff@...>   or   <melecerties@...>
Using Linux: Ubuntu 11.04 on Intel or Debian on UltraSparc
and even on the NAS.   Avoiding Micro$oft like the plague.
##

410. Reviving an old FT290R

Yahoo group: electrichandbag
Date: 2011-10-14 11:29:26 UTC
From: jmrhzu@btinternet.com
Topic: 410 Message: 410

Hi
I'm new to the group and I've just bought a mk1 FT290R that is in a slightly sorry state and I'm in the process of repairing it.

It had several faults and it looked like the previous owner gave up trying to repair it.

The two main faults on mine were lack of Tx power and the s meter was sticking over on receive. Both these were easy to fix and I was pleasantly surprised how accessible the main RF board was in terms of desoldering and swapping out parts (compared to other portable radios that is)

It was also miles out of alignment and I'm in the process of following the alignment guide. Not too impressed with the presentation and methods in the guide but so far so good.

This radio has the little Mutek board in it and the receiver certainly seems very sensitive.

The mode switch is loose so at some point I'll have to see how easy it is to remove the front panel. Anyone got any useful tips on how to get the front panel off?

Regards
G0HZU

411. Re: [electrichandbag] Reviving an old FT290R

Yahoo group: electrichandbag
Date: 2011-10-14 16:14:18 UTC
From: Gordon JC Pearce
Topic: 410 Message: 411

On Fri, 14 Oct 2011 11:29:26 -0000
"jmrhzu@..." <jmrhzu@...> wrote:

> This radio has the little Mutek board in it and the receiver certainly seems very sensitive.

I must get around to swapping my Mutek from one to the other

> The mode switch is loose so at some point I'll have to see how easy it is to remove the front panel. Anyone got any useful tips on how to get the front panel off?

Take it to your friendly neighbourhood radio-fixing enthusiast and get them to do it. Remain out of earshot if your sense of decency stops short of foul language.

No? Okay, well then if you take off the strap buttons and large Philips screws on the sides you can get at smaller Philips screws that hold the front panel bracket on. Unscrew the aerial, and with your ridiculous 50W car battery terminal soldering iron remove the braid from the aerial tube. You can now pull the front forwards a tiny bit, enough to get at the connectors.

You might not need to do this if all you want to do is tighten the mode switch, since if you whip the bottom covers off to get at the batteries you can see the big blue mode switch right there in the middle. Pull the knob off the splined shaft and nip up the slotted nut.

--
Gordon JC Pearce MM0YEQ <gordonjcp@...>

412. Re: Reviving an old FT290R

Yahoo group: electrichandbag
Date: 2011-10-14 22:46:43 UTC
From: g0hzu
Topic: 410 Message: 412

Hi Gordon
Thanks for the hints.

Ideally, I'd like to remove the whole front panel so I can also clean some dust out from the LCD area behind the front lens but if I can do the mode switch as you have suggested I think I'll leave the dust where it is :)

I also have a Standard C58 here which was the alternative to the 290 back in the early 1980s. I've had the C58 about 25 years and it's still working fine.

I've got the 290 aligned now although I also had to adjust the PA bias to get good SSB audio quality. There didn't seem to be any instructions how to do this so I set it for the lowest bias that sounded good enough.

The overall instructions for the synthesiser alignment were quite odd
in the manual and I ended up using my own approach in order to get the frequency as accurate as possible for SSB on the clarifier etc.

Sadly, this 290 is missing its internal battery holder so I'll have to get one of those from ebay and it also doesn't have the leather? case or strap.

Regards
Jeremy

G0HZU

--- In electrichandbag@yahoogroups.com, Gordon JC Pearce <gordon@...> wrote:
>
> On Fri, 14 Oct 2011 11:29:26 -0000
> "jmrhzu@..." <jmrhzu@...> wrote:
>
> > This radio has the little Mutek board in it and the receiver certainly seems very sensitive.
>
> I must get around to swapping my Mutek from one to the other
>
> > The mode switch is loose so at some point I'll have to see how easy it is to remove the front panel. Anyone got any useful tips on how to get the front panel off?
>
> Take it to your friendly neighbourhood radio-fixing enthusiast and get them to do it. Remain out of earshot if your sense of decency stops short of foul language.
>
> No? Okay, well then if you take off the strap buttons and large Philips screws on the sides you can get at smaller Philips screws that hold the front panel bracket on. Unscrew the aerial, and with your ridiculous 50W car battery terminal soldering iron remove the braid from the aerial tube. You can now pull the front forwards a tiny bit, enough to get at the connectors.

>
> You might not need to do this if all you want to do is tighten the mode switch, since if you whip the bottom covers off to get at the batteries you can see the big blue mode switch right there in the middle. Pull the knob off the splined shaft and nip up the slotted nut.
>
> --
> Gordon JC Pearce MM0YEQ <gordonjcp@...>
>

413. Re: [electrichandbag]Setting up the clip-on linear FT290RII

Yahoo group: electrichandbag
Date: 2011-10-15 11:23:43 UTC
From: Geoff Blake
Topic: 413 Message: 413

Hi All,

Does anybody have any info on setting up the clip-on linear for the FT290RII please. I believe that there are two versions, a 10W and a 25W versions. I am not certain which I have.

Thanks Geoff G8GNZ

--
##
Geoff Blake, G8GNZ JO01fq: Chelmsford, Essex, UK
<geoff@...> or <melecerties@...>
Using Linux: Ubuntu 11.04 on Intel or Debian on UltraSparc
and even on the NAS. Avoiding Micro$oft like the plague.
##

414. Re: Reviving an old FT290R

Yahoo group: electrichandbag
Date: 2011-10-15 09:36:09 UTC
From: GM8BJF
Topic: 410 Message: 414

The battery holders for 4 "C" cells are available from Maplin. Two are required. Can't remember the part number but their one is pretty much identical to the original. I had to do this to mine as the originals had disintegrated.

73s

Brian,
GM8BJF.

--- In electrichandbag@yahoogroups.com, "g0hzu" <jmrhzu@...> wrote:
>
> Hi Gordon
> Thanks for the hints.
>
> Ideally, I'd like to remove the whole front panel so I can also clean some dust out from the LCD area behind the front lens but if I can do the mode switch as you have suggested I think I'll leave the dust where it is :)
>
> I also have a Standard C58 here which was the alternative to the 290 back in the early 1980s. I've had the C58 about 25 years and it's still working fine.
>
> I've got the 290 aligned now although I also had to adjust the PA bias to get good SSB audio quality. There didn't seem to be any instructions how to do this so I set it for the lowest bias that sounded good enough.
>
> The overall instructions for the synthesiser alignment were quite odd
> in the manual and I ended up using my own approach in order to get the frequency as accurate as possible for SSB on the clarifier etc.
>
> Sadly, this 290 is missing its internal battery holder so I'll have to get one of those from ebay and it also doesn't have the leather? case or strap.
>
> Regards
> Jeremy
>
> G0HZU
>
>
>
>
>
> --- In electrichandbag@yahoogroups.com, Gordon JC Pearce <gordon@> wrote:
> >
> > On Fri, 14 Oct 2011 11:29:26 -0000
> > "jmrhzu@" <jmrhzu@> wrote:
> >

> > > This radio has the little Mutek board in it and the receiver certainly seems very sensitive.
> >
> > I must get around to swapping my Mutek from one to the other
> >
> > > The mode switch is loose so at some point I'll have to see how easy it is to remove the front panel. Anyone got any useful tips on how to get the front panel off?
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> > No? Okay, well then if you take off the strap buttons and large Philips screws on the sides you can get at smaller Philips screws that hold the front panel bracket on. Unscrew the aerial, and with your ridiculous 50W car battery terminal soldering iron remove the braid from the aerial tube. You can now pull the front forwards a tiny bit, enough to get at the connectors.
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> > You might not need to do this if all you want to do is tighten the mode switch, since if you whip the bottom covers off to get at the batteries you can see the big blue mode switch right there in the middle. Pull the knob off the splined shaft and nip up the slotted nut.
> >
> > --
> > Gordon JC Pearce MM0YEQ <gordonjcp@>
> >
>

415. FT290R mk1 Schematic Merged Widescreen Version!

Yahoo group: electrichandbag
Date: 2011-10-15 13:15:52 UTC
From: g0hzu
Topic: 415 Message: 415

Just to let you know I've uploaded a merged version of the FT290R mk1
schematics into the file area.

I got fed up going cross eyed tracing the discrete pages so here is a
super widescreen version created in paint shop pro.

You can see the joins but it's still very useful.

FT290R mk1 Schematic Widescreen Version
<http://f1.grp.yahoofs.com/v1/0IOZTrJS-EmX5NyLXhgIyM-M6ILhO12b38B4-BiyYU\
oomEKK_OcMrBccRfQbABH3VuOHb8w1I7EgBeRzP4gbWPg-C7CpJmoMxyRJX-mWXiw8JqYK/f\
t290_schem11.jpg>

Enjoy!

Regards
Jeremy
G0HZU

416. Re: [electrichandbag]Setting up the clip-on linear FT290RII

Yahoo group: electrichandbag
Date: 2011-10-15 14:01:07 UTC
From: g0hzu
Topic: 413 Message: 416

Hi Geoff

I've uploaded the FL-2025 intro manual with schematics to the files area
here:

FL-2025 Manual
<http://f1.grp.yahoofs.com/v1/0IOZTjTZs2SX5NyL7hJKrQejdpDQSiCdoF5D1lULtV\
enlKEXao3bXGYVUGfSj5_YRNY_LxkRfCGrGWWtHt7EIF1_Mw6IxVqmuPwTSgRJKXKMctAT/y\
aesu_fl-2025_%5BET%5D.pdf>

You can see it uses a Mitsubishi power brick inside M57727 to get 25W on
2 metres.

Hope this helps

Jeremy

--- In electrichandbag@yahoogroups.com, Geoff Blake <geoff@...> wrote:
>
> Hi All,
>
> Does anybody have any info on setting up the clip-on linear for the
> FT290RII please. I believe that there are two versions, a 10W and a
> 25W versions. I am not certain which I have.
>
> Thanks Geoff G8GNZ
>
>
>
>
> --
> ###
> Geoff Blake, G8GNZ JO01fq: Chelmsford, Essex, UK
> geoff@... or melecerties@...
> Using Linux: Ubuntu 11.04 on Intel or Debian on UltraSparc
> and even on the NAS. Avoiding Micro$oft like the plague.
> ###
>

417. Re: [electrichandbag]Setting up the clip-on linear FT290RII

Yahoo group: electrichandbag
Date: 2011-10-15 23:54:06 UTC
From: Geoff Blake
Topic: 413 Message: 417

Thanks Jeremy, a quick job for tomorrow.

73 Geoff G8GNZ

On 15 October 2011 15:01, g0hzu <jmrhzu@...> wrote:

>
>
>
>
>
>
>
> Hi Geoff
>
> I've uploaded the FL-2025 intro manual with schematics to the files area
> here:
>
> FL-2025 Manual<http://f1.grp.yahoofs.com/v1/0IOZTjTZs2SX5NyL7hJKrQejdpDQSiCdoF5D1lULtVenlKEXao3bXGYVUGfSj5_YRNY_LxkRfCGrGWWtHt7EIF1_Mw6IxVqmuPwTSgRJKXKMctAT/yaesu_fl-2025_%5BET%5D.pdf>
>
>
> You can see it uses a Mitsubishi power brick inside M57727 to get 25W on 2
> metres.
>
> Hope this helps
>
> Jeremy
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> --- In electrichandbag@yahoogroups.com, Geoff Blake <geoff@...> wrote:
> >
> > Hi All,
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> > Does anybody have any info on setting up the clip-on linear for the
> > FT290RII please. I believe that there are two versions, a 10W and a
> > 25W versions. I am not certain which I have.
> >
> > Thanks Geoff G8GNZ
> >
> >
> >
> >
> > --
> > ###
> > Geoff Blake, G8GNZ JO01fq: Chelmsford, Essex, UK
> > geoff@... or melecerties@...
>
> > Using Linux: Ubuntu 11.04 on Intel or Debian on UltraSparc
> > and even on the NAS. Avoiding Micro$oft like the plague.
> > ###
> >
>
>
>
>

--
###
Geoff Blake, G8GNZ JO01fq: Chelmsford, Essex, UK
<geoff@...> or <melecerties@...>
Using Linux: Ubuntu 11.04 on Intel or Debian on UltraSparc
and even on the NAS. Avoiding Micro$oft like the plague.
###

418. Re: Reviving an old FT290R

Yahoo group: electrichandbag
Date: 2011-10-15 23:58:04 UTC
From: g0hzu
Topic: 410 Message: 418

Wow thanks for this info, Brian.

I'll check out the battery holders the next time I'm in Cheltenham.
Regards
Jeremy
G0HZU

--- In electrichandbag@yahoogroups.com, "GM8BJF" <brian.flynn@...> wrote:
>
>
> The battery holders for 4 "C" cells are available from Maplin. Two are required. Can't remember the part number but their one is pretty much identical to the original. I had to do this to mine as the originals had disintegrated.
>
> 73s
>
> Brian,
> GM8BJF.
>
> --- In electrichandbag@yahoogroups.com, "g0hzu" <jmrhzu@> wrote:
> >
> > Hi Gordon
> > Thanks for the hints.
> >
> > Ideally, I'd like to remove the whole front panel so I can also clean some dust out from the LCD area behind the front lens but if I can do the mode switch as you have suggested I think I'll leave the dust where it is :)
> >
> > I also have a Standard C58 here which was the alternative to the 290 back in the early 1980s. I've had the C58 about 25 years and it's still working fine.
> >
> > I've got the 290 aligned now although I also had to adjust the PA bias to get good SSB audio quality. There didn't seem to be any instructions how to do this so I set it for the lowest bias that sounded good enough.
> >
> > The overall instructions for the synthesiser alignment were quite odd
> > in the manual and I ended up using my own approach in order to get the frequency as accurate as possible for SSB on the clarifier etc.
> >
> > Sadly, this 290 is missing its internal battery holder so I'll have to get one of those from ebay and it also doesn't have the leather? case or strap.
> >
> > Regards
> > Jeremy
> >

> > G0HZU
> >
> >
> >
> >
> >
> > --- In electrichandbag@yahoogroups.com, Gordon JC Pearce <gordon@> wrote:
> > >
> > > On Fri, 14 Oct 2011 11:29:26 -0000
> > > "jmrhzu@" <jmrhzu@> wrote:
> > >
> > > > This radio has the little Mutek board in it and the receiver certainly seems very sensitive.
> > >
> > > I must get around to swapping my Mutek from one to the other
> > >
> > > > The mode switch is loose so at some point I'll have to see how easy it is to remove the front panel. Anyone got any useful tips on how to get the front panel off?
> > >
> > > Take it to your friendly neighbourhood radio-fixing enthusiast and get them to do it. Remain out of earshot if your sense of decency stops short of foul language.
> > >
> > > No? Okay, well then if you take off the strap buttons and large Philips screws on the sides you can get at smaller Philips screws that hold the front panel bracket on. Unscrew the aerial, and with your ridiculous 50W car battery terminal soldering iron remove the braid from the aerial tube. You can now pull the front forwards a tiny bit, enough to get at the connectors.
> > >
> > > You might not need to do this if all you want to do is tighten the mode switch, since if you whip the bottom covers off to get at the batteries you can see the big blue mode switch right there in the middle. Pull the knob off the splined shaft and nip up the slotted nut.
> > >
> > > --
> > > Gordon JC Pearce MM0YEQ <gordonjcp@>
> > >
> >
>

419. Re: [electrichandbag] Re: Reviving an old FT290R

Yahoo group: electrichandbag
Date: 2011-10-16 20:16:00 UTC
From: geoffrey mendelson
Topic: 410 Message: 419

On Oct 16, 2011, at 1:58 AM, g0hzu wrote:

>
> Wow thanks for this info, Brian.
>
> I'll check out the battery holders the next time I'm in Cheltenham.
>

You may want to get AA holders instead. I replaced the C cells in my 290R II with AA long discharge NiMH batteries. They are available almost everywhere, hold 80% of their charge a year, can easily be recharged and at 2500 mAh, hold a lot more than the NiCad batteries they replaced.

The Mark II uses a different case design, it is custom fitted for the C batteries, so I had to use adaptor sleeves. This gave me no power, the AA batteries top is slightly shorter than the C cells. I had to put metal washers on the tops of them to make contact. Because of the annoyance of putting it back together and still making contact, I charge the batteries in the case.

Geoff.

--
Geoffrey S. Mendelson, N3OWJ/4X1GM
My high blood pressure medicine reduces my midichlorian count. :-(

420. Re: FT290R mk1 Schematic Merged Widescreen Version!

Yahoo group: electrichandbag
Date: 2011-10-18 16:11:05 UTC
From: R Kelly
Topic: 415 Message: 420

Hi Jeremy, Many thanks for taking the time to re-draw the schematic,
It makes things a whole lot easier.
best 73 Richard.

--- In electrichandbag@yahoogroups.com, "g0hzu" <jmrhzu@...> wrote:
>
>
> Just to let you know I've uploaded a merged version of the FT290R mk1
> schematics into the file area.
>
> I got fed up going cross eyed tracing the discrete pages so here is a
> super widescreen version created in paint shop pro.
>
> You can see the joins but it's still very useful.
>
> FT290R mk1 Schematic Widescreen Version
> <http://f1.grp.yahoofs.com/v1/0IOZTrJS-EmX5NyLXhgIyM-M6ILhO12b38B4-BiyYU\
> oomEKK_OcMrBccRfQbABH3VuOHb8w1I7EgBeRzP4gbWPg-C7CpJmoMxyRJX-mWXiw8JqYK/f\
> t290_schem11.jpg>
>
> Enjoy!
>
> Regards
> Jeremy
> G0HZU
>

421. Re: [electrichandbag] FT290R mk1 Schematic Merged Widescreen Version!

Yahoo group: electrichandbag
Date: 2011-10-18 17:16:18 UTC
From: Mansueto Grech
Topic: 415 Message: 421

Hi Jeremy,
I keep getting Document cannot be found error when I click on the link. Am I doing something wrong?
73's

Mans. 9H1GB
On Oct 15, 2011 10:35 PM, "g0hzu" <jmrhzu@...> wrote:

> **
>
>
> Just to let you know I've uploaded a merged version of the FT290R mk1
> schematics into the file area.
>
> I got fed up going cross eyed tracing the discrete pages so here is a super
> widescreen version created in paint shop pro.
>
> You can see the joins but it's still very useful.
>
> FT290R mk1 Schematic Widescreen Version<http://f1.grp.yahoofs.com/v1/0IOZTrJS-EmX5NyLXhgIyM-M6ILhO12b38B4-BiyYUoomEKK_OcMrBccRfQbABH3VuOHb8w1I7EgBeRzP4gbWPg-C7CpJmoMxyRJX-mWXiw8JqYK/ft290_schem11.jpg>
>
>
> Enjoy!
>
> Regards
> Jeremy
> G0HZU
>
>

422. Re: [electrichandbag] FT290R mk1 Schematic Merged Widescreen Version!

Yahoo group: electrichandbag
Date: 2011-10-18 18:30:24 UTC
From: Gordon JC Pearce
Topic: 415 Message: 422

On Tue, 18 Oct 2011 19:16:18 +0200
Mansueto Grech <mansueto.grech@...> wrote:

> Hi Jeremy,
> I keep getting Document cannot be found error when I click on the link. Am I
> doing something wrong?
> 73's

This is because Yahoo! Groups insist on this totally clownshoe naming scheme for files, where they pack about an extra 128 random characters into the URL. Presumably, this is so that when you attempt to send the link in an email bits of it get lost as it wraps around several lines.

You can get to the file from the Files section of the Yahoo! Group pages, or you can follow this link here:
http://tinyurl.com/5ujktqe

Finally, I've taken the liberty of uploading it to my own webserver in case anyone *still* has trouble with it - Yahoo! seemed reluctant to serve the file at all. Here it is:

http://www.gjcp.net/media/ft290_schem11.jpg

If anyone else needs any files similar to this hosted, without jumping through Yahoo's hoops, then drop me an email off-list. As long as you've got the rights to distribute them, I'm happy to host them.

--
Gordon JC Pearce MM0YEQ <gordonjcp@...>

423. Re: [electrichandbag] FT290R mk1 Schematic Merged Widescreen Version!

Yahoo group: electrichandbag
Date: 2011-10-18 20:07:43 UTC
From: Mansueto Grech
Topic: 415 Message: 423

Hi Gordon,
Thanks for the reply and the link
Again thanks 73's

Mans. 9H1GB
On Oct 18, 2011 8:30 PM, "Gordon JC Pearce" <gordon@...> wrote:

> **
>
>
> On Tue, 18 Oct 2011 19:16:18 +0200
> Mansueto Grech <mansueto.grech@gmail.com> wrote:
>
> > Hi Jeremy,
> > I keep getting Document cannot be found error when I click on the link.
> Am I
> > doing something wrong?
> > 73's
>
> This is because Yahoo! Groups insist on this totally clownshoe naming
> scheme for files, where they pack about an extra 128 random characters into
> the URL. Presumably, this is so that when you attempt to send the link in an
> email bits of it get lost as it wraps around several lines.
>
> You can get to the file from the Files section of the Yahoo! Group pages,
> or you can follow this link here:
> http://tinyurl.com/5ujktqe
>
> Finally, I've taken the liberty of uploading it to my own webserver in case
> anyone *still* has trouble with it - Yahoo! seemed reluctant to serve the
> file at all. Here it is:
>
> http://www.gjcp.net/media/ft290_schem11.jpg
>
> If anyone else needs any files similar to this hosted, without jumping
> through Yahoo's hoops, then drop me an email off-list. As long as you've got
> the rights to distribute them, I'm happy to host them.
>
> --
> Gordon JC Pearce MM0YEQ <gordonjcp@...>
>
>

424. Re: [electrichandbag] FT290R mk1 Schematic Merged Widescreen Version!

Yahoo group: electrichandbag
Date: 2011-10-18 17:49:04 UTC
From: JMR
Topic: 415 Message: 424

Hi Mans
Sorry but I made an error with the link (it doesn't work!) but you can still find the widescreen schematic if you look in the Files area of the EH group.

This is over in the left column on the ElectricHandbag homepage. Just click on 'Files' and it should be amongst all the files stored there.

Regards
Jeremy

----- Original Message -----
From: Mansueto Grech
To: electrichandbag@yahoogroups.com
Sent: Tuesday, October 18, 2011 6:16 PM
Subject: Re: [electrichandbag] FT290R mk1 Schematic Merged Widescreen Version!

Hi Jeremy,
I keep getting Document cannot be found error when I click on the link. Am I doing something wrong?
73's

Mans. 9H1GB

On Oct 15, 2011 10:35 PM, "g0hzu" <jmrhzu@...> wrote:

Just to let you know I've uploaded a merged version of the FT290R mk1 schematics into the file area.

I got fed up going cross eyed tracing the discrete pages so here is a super widescreen version created in paint shop pro.

You can see the joins but it's still very useful.

FT290R mk1 Schematic Widescreen Version

Enjoy!

Regards
Jeremy
G0HZU

425. Mutek for sale

Yahoo group: electrichandbag
Date: 2011-10-27 11:10:39 UTC
From: Michael
Topic: 425 Message: 425

I've put the Mutek board I don't really
feel like installing on Ebay.

It's item number 160672632281 on ebay.co.uk if you
are interested. I've never seen it working
so I'm offering a 14 day money back on return.

cheers

Mike

426. FT290R mk1 RF tests

Yahoo group: electrichandbag
Date: 2011-11-13 14:20:08 UTC
From: g0hzu
Topic: 426 Message: 426

I've done a load of RF testing on my recently acquired mk1 290 and wondered if this might be of interest.

Therefore, I've posted up a folder in the files area called "FT290R Tests by G0HZU"

At the minute there's only one document in there and this shows the audio response of the radio for FM pre-emphasis and de-emphasis.

It also shows the combined (cancelled?) effect of these when two FT290rs 'meet' on the air.

There's also a plot of SSB audio response.

I've done a whole load more testing eg synthesiser phase noise and receiver tests and transmitter tests for linearity etc and I'll try and add more docs in the near future.
Regards
Jeremy
G0HZU

427. Re: FT290R mk1 RF tests

Yahoo group: electrichandbag
Date: 2011-11-14 17:49:21 UTC
From: zl1ujg
Topic: 426 Message: 427

Hi,
Nice work on the tests of the 290 Mk1.
Kevin ZL1UJG

428. Re: FT290R mk1 RF tests

Yahoo group: electrichandbag
Date: 2011-11-15 00:12:51 UTC
From: g0hzu
Topic: 426 Message: 428

--- In electrichandbag@yahoogroups.com, "zl1ujg" <zl1ujg@...> wrote:
>
> Hi,
> Nice work on the tests of the 290 Mk1.
> Kevin ZL1UJG
>

Hi Kevin
Thanks for the feedback. I've now added another document to the files area and this explores the modulation performance of the mk1 FT290R a little further.

It shows some basic modulation linearity checks on FM and SSB transmit modes.

Regards
Jeremy
G0HZU

429. Re: [electrichandbag] FT290R mk1 RF tests

Yahoo group: electrichandbag
Date: 2011-11-15 13:14:09 UTC
From: Mansueto Grech
Topic: 426 Message: 429

Hi Jeremy,
Well done indeed. Very nice and informative.

Tahnks
Mans. 9H1GB

On 13 November 2011 15:20, g0hzu <jmrhzu@...> wrote:

> **
>
>
> I've done a load of RF testing on my recently acquired mk1 290 and
> wondered if this might be of interest.
>
> Therefore, I've posted up a folder in the files area called "FT290R Tests
> by G0HZU"
>
> At the minute there's only one document in there and this shows the audio
> response of the radio for FM pre-emphasis and de-emphasis.
>
> It also shows the combined (cancelled?) effect of these when two FT290rs
> 'meet' on the air.
>
> There's also a plot of SSB audio response.
>
> I've done a whole load more testing eg synthesiser phase noise and
> receiver tests and transmitter tests for linearity etc and I'll try and add
> more docs in the near future.
> Regards
> Jeremy
> G0HZU
>
>
>

430. replacment relays for the 290 mk1

Yahoo group: electrichandbag
Date: 2011-11-15 18:10:30 UTC
From: Jim
Topic: 430 Message: 430

Hi,
Does anyone know where there is a supply of Fujitsu relays for the ft290 mk1, the relay in question is RL2001 on the main chassis.
The part number is M1190001 and the description is FBR211AD009M I have found that this relay is now discontinued by the manufacturers Fujitsu.
If none are available does anyon have a suggestion as to which relay could be used as a replacement.
thanks in anticapation jim G1ASN

431. Foil view of PCB

Yahoo group: electrichandbag
Date: 2011-11-16 13:49:14 UTC
From: colin
Topic: 431 Message: 431

Does anybody have a foil view of the main PCB around Q1014, Q1015 and Q1016? I am trying to find faults in that region and it is hard to locate compeonents on the solder side of the PCB!

Thanks

Colin - G8FRA/M5FRA

432. Re: Foil view of PCB

Yahoo group: electrichandbag
Date: 2011-11-16 20:15:42 UTC
From: colin
Topic: 431 Message: 432

Forget my last message I found what I needed in the files section. I replaced Q1014 as my tester showed it had an hfe of 2, used a BC847. Also replaced one of the diodes I crunched when changing a cap used an OA91. When I got everything back to normal the fault was still there. Tried a 47K across b-e but in the end used a 56k. S meter now near zero and full power out. Audio out sounds a bit quiet when receiving the local repeater. Maybe more caps need changing...

Colin - M5FRA

433. More on the AGC/ALC fault

Yahoo group: electrichandbag
Date: 2011-11-17 10:33:58 UTC
From: colin
Topic: 433 Message: 433

I got the radio working again by replacing Q1014 as my tester showed it had an hfe of 2 - used a BC847. Also replaced the diode I crunched - used an OA91. When I got everything back to 'normal' the fault was still there so put a 47K across b-e. That got it working but the S meter does not register any RX signal strength and I cannot set it up using the alingment procedure in the manual. There are also some other issues with the TX O/P, it is down slightly on what it was.

Overall I think the 47k resistor is not a fix for this problem but a bodge that gets the radios working again. If I had the patience and foil side layouts then I might continue looking around Q1014, 1015 and 1016 especially at R66 and R67 and Q1015. As it is I am inclined to ebay the set and get what I can for a partly working radio. Life is too short and there are lots of other more interesting projects and better IFs for 3cm!

Colin - G8FRA/M5FRA

434. Re: More on the AGC/ALC fault

Yahoo group: electrichandbag
Date: 2011-11-18 04:21:19 UTC
From: zl1ujg
Topic: 433 Message: 434

Hi,
I have just put the 47k in my old FT290 Mk1 which had showed the problem. Yes it had apparently fixed the slow AGC startup. And the S- meter is really mean.

It is interesting that even with replacing Q1014 it showed the issue
I had a quick look at the schematic and wonder whether there is a path for leakage to the base of the Q1014 AGC transistor.

Putting the 47k there will reduce the sensitivity of the circuit to input currents, so the AGC and ALC may not work efficiently. (Better than being locked up (or down) though.

It just needs some way of decreasing the threshold again. Have larger values of resistance been tried?

Its possible that humidity or moisture in the flux/ PCB is an issue with the Mkl's over time.

Without the 47k has anyone measured the base-emitter volts of the Q1014 transistor?

ZL1UJG

435. Re: More on the AGC/ALC fault

Yahoo group: electrichandbag
Date: 2011-11-17 22:06:11 UTC
From: GM8BJF
Topic: 433 Message: 435

Thats a shame. Sounds as if the radio has multiple faults.

73s

Brian
--- In electrichandbag@yahoogroups.com, "colin" <m5fra@...> wrote:
>
> I got the radio working again by replacing Q1014 as my tester showed it had an hfe of 2 - used a BC847. Also replaced the diode I crunched - used an OA91. When I got everything back to 'normal' the fault was still there so put a 47K across b-e. That got it working but the S meter does not register any RX signal strength and I cannot set it up using the alingment procedure in the manual. There are also some other issues with the TX O/P, it is down slightly on what it was.
>
> Overall I think the 47k resistor is not a fix for this problem but a bodge that gets the radios working again. If I had the patience and foil side layouts then I might continue looking around Q1014, 1015 and 1016 especially at R66 and R67 and Q1015. As it is I am inclined to ebay the set and get what I can for a partly working radio. Life is too short and there are lots of other more interesting projects and better IFs for 3cm!
>
> Colin - G8FRA/M5FRA
>

436. Re: [electrichandbag] Re: More on the AGC/ALC fault

Yahoo group: electrichandbag
Date: 2011-11-18 09:06:31 UTC
From: M5FRA - Colin
Topic: 433 Message: 436

Brain, it is annoying. I found a broken resistor on a part of the board that I had not touched, replacing that restored full audio O/P. All that is left now is the S meter and I guess anybody can live with that. What gets to me is that the 47k is a bodge, the real fault is still there. As I said I have other projects waiting and I just do not think it is worth spending a lot of time poking around with no clear direction. The SDR radio awaits as does learning how to use the VNWR!

Colin - G8FRA/M5FRA

www.m5fra.org.uk

------ Original Message ------
From: "GM8BJF" <brian.flynn@tiscali.co.uk>
To: electrichandbag@yahoogroups.com
Sent: 17/11/2011 22:06:11
Subject: [electrichandbag] Re: More on the AGC/ALC fault
>Thats a shame. Sounds as if the radio has multiple faults.
>
>73s
>
>Brian
>--- In electrichandbag@yahoogroups.com, "colin" <m5fra@...> wrote:
>
>>
>>
>>I got the radio working again by replacing Q1014 as my tester showed it had an hfe of 2 - used a BC847. Also replaced the diode I crunched - used an OA91. When I got everything back to 'normal' the fault was still there so put a 47K across b-e. That got it working but the S meter does not register any RX signal strength and I cannot set it up using the alingment procedure in the manual. There are also some other issues with the TX O/P, it is down slightly on what it was.
>>
>>Overall I think the 47k resistor is not a fix for this problem but a bodge that gets the radios working again. If I had the patience and foil side layouts then I might continue looking around Q1014, 1015 and 1016 especially at R66 and R67 and Q1015. As it is I am inclined to ebay the set and get what I can for a partly working radio. Life is too short and there are lots of other more interesting projects and better IFs for 3cm!
>>
>>Colin - G8FRA/M5FRA
>>
>>
>
>
>
>

>
>----------
>
>Yahoo! Groups Links
>
>http://groups.yahoo.com/group/electrichandbag/
>
>http://groups.yahoo.com/group/electrichandbag/join
> (Yahoo! ID required)
>
>
>http://docs.yahoo.com/info/terms/
>
>
>

437. AGC/ALC

Yahoo group: electrichandbag
Date: 2011-11-19 04:26:14 UTC
From: zl1ujg
Topic: 437 Message: 437

Hi,
Interesting... The TX on SSB is not there or very low, FM appears to be ok

Checked the RX sensitivity, and it seems to hear -120 dBm solidly on all modes. (It also sounds like AGC is very mean or has a very high threshold.)

Since I didnt have C rechargable batteries, I decided to put two 6V 1.3 Ah SLA batteries in the compartment. Put a 750mA polyswitch in series (RXE075), so prevents any problems. (The 2 SLA batteries are about 30% dearer than just two C type batteries, so its quite a price saving)

Two 15 ohms in parallel across the charger diode, lets it charge ok via 13.8v PSU. (looks a little like the Elecraft K2 setup)

Also saw a posting in the files section about the TX SSB response.
Very nice work.

Kevin
ZL1UJG

438. Re: AGC/ALC

Yahoo group: electrichandbag
Date: 2011-11-19 05:17:32 UTC
From: zl1ujg
Topic: 437 Message: 438

Hi,
I also tried CW, and full output...?
So I suspect C86 (and possibly C87 as well) is probably leaky.
It still doesnt explain why the 47k works on Q1014 b-e unless the leaky electrolyte has turned on Q1014 slightly.
Cleaning the PCB (top and bottom) after removal of the capacitors is necessary I think...

Kevin

439. Re: AGC/ALC

Yahoo group: electrichandbag
Date: 2011-11-23 09:56:52 UTC
From: zl1ujg
Topic: 437 Message: 439

Hi,
I hadnt bothered to check deviation on FM, and found out there wasnt any either, when using the YM-47 microphone. I tried a YM-49 microphone from the FT790 Mk1, and deviation and SSB looked good. I could tap the YM-47 dynamic insert and about 5% of the time it worked.

I might have some bits to convert it into a electret mic, as the molding allows that. (Getting the right dynamic insert could be a little tricky otherwise) The mic cable looks to have a spare wire for the DC feed, but not for a speaker...like on the YM49

Kevin
ZL1UJG

440. FT-690R Carrier Balance

Yahoo group: electrichandbag
Date: 2011-11-27 15:30:12 UTC
From: Wayne
Topic: 440 Message: 440

I'm trying to perform an alignment on an FT-690R. I'm having a problem with setting the Carrier Balance. I can find the null point using VR1001, and while this reduces the carrier somewhat, there is still a significant carrier present on a monitoring receiver. Where should I look now to fix this problem?

Thanks

Wayne.

441. botched AGC repair or second fault?

Yahoo group: electrichandbag
Date: 2011-11-27 16:58:21 UTC
From: steve.w.harris@btinternet.com
Topic: 441 Message: 441

firstly thanks to all posters for the advice that is here, using it i have succesfully fixed the TX fault on my FT290 mk1 and attempted the AGC 47k resistor fix. now the set works on TX all modes with a reported good audio and RX on SSB & CW works well but on FM the busy light is on all the time, squelch has no effect and altough the s-meter seems to correctly show a signal there is no audio out from the speaker. there a background hiss. the question is, have i botched the agc repair or could there a second fault? joints look good and the resistor is in the correct place.
Steve G7BCE

442. Re: [electrichandbag] botched AGC repair or second fault?

Yahoo group: electrichandbag
Date: 2011-11-27 19:58:13 UTC
From: Mansueto Grech
Topic: 441 Message: 442

Hi Steve,
Don't mean to be a joy killer, but to ensure you really cud the problem,leave the unit unpowered for a few day and then power it up again and if it works then you've really cured it. I am telling you his because I have yelled many times Ulrika and ended back to square one.
Anyway good luck and let us know the outcome please.\7's
Mans. 9H1GB

On 27 November 2011 17:58, steve.w.harris@... <
steve.w.harris@...> wrote:

> **
>
>
> firstly thanks to all posters for the advice that is here, using it i have
> succesfully fixed the TX fault on my FT290 mk1 and attempted the AGC 47k
> resistor fix. now the set works on TX all modes with a reported good audio
> and RX on SSB & CW works well but on FM the busy light is on all the time,
> squelch has no effect and altough the s-meter seems to correctly show a
> signal there is no audio out from the speaker. there a background hiss.
> the question is, have i botched the agc repair or could there a second
> fault? joints look good and the resistor is in the correct place.
> Steve G7BCE
>
>
>

443. Re: FT-690R Carrier Balance

Yahoo group: electrichandbag
Date: 2011-11-28 11:52:22 UTC
From: g3vvt@aol.com
Topic: 440 Message: 443

Hi Wayne,

Looking at the diagram for the FT-290R which should be basically similar, VR1001 on the MC1496P balanced modulator Q11012 does the carrier balance which is probably what you are adjusting.

Going back to radio basics the other item that is involved in the process is where the carrier is situated on the SSB IF filter response. The carrier is usually placed so that from memory with the lower edge of the IF passband (-6dB point) at 300Hz you would expect about -20dB attenuation due to the filter action at the carrier frequency (and be able to pass up to 2.7kHz at the upper end with a 2.4kHz BW filter). If the carrier placing is offset towards the filter passband the carrier null will be reduced and create difficulties as you describe. A similar effect could be due to problems with the MC1469P + associated components or the SSB IF filter being defective or even audio pickup from the microphone TX audio stages upsetting the result.

Suggest you first try adjusting the SSB CARRIER POINT ADJUSTMENT according to the Instruction Manual and then the CARRIER BALANCE ADJUSTMENT to see if improvement is made before going deeper into the problem.

You can use an alternative method of checking out how things are working which I did when building the Elecraft K2 from a kit and setting up the various parameters. With this the Spectrogram software was used with a PC and sound card to get the IF response and carrier setting points. To enable this the RX antenna input was driven with a noise generator you can build from one of the Elecraft Mini Module, N Gen kits: _www.elecraft.com/_ (http://www.elecraft.com/) . The software was free or shareware up to V5.17 which can possibly be still obtained from various sources. With this you see the IF response on the PC screen which was a valuable aid when starting from scratch.

Regards,
Bob, G3VVT

444. Re: More on the AGC/ALC fault

Yahoo group: electrichandbag
Date: 2011-12-03 08:12:31 UTC
From: colin
Topic: 433 Message: 444

I got the radio out to test a couple of days ago and it worked first time, no sign of the 290 fault. In the end I replaced about 12 electrolytics, a transistor and did the PW mod. All looks OK now except the S meter does not work which is not a real problem as it was useless before. I was going to use the radio as a 2m IF for 10Ghz but my health is not as good as it was and humping around a lot of gear and batteries for 10Ghz /P is not really sensible so the radio is on ebay.

Colin G8FRA/M5FRA

445. Re: FT-690R Carrier Balance

Yahoo group: electrichandbag
Date: 2011-11-28 22:31:44 UTC
From: Wayne
Topic: 440 Message: 445

Thanks Bob.

You were spot on. The ssb carrier point needed alignment. Works well now.

Wayne.

--- In electrichandbag@yahoogroups.com, g3vvt@... wrote:
>
> Hi Wayne,
>
> Looking at the diagram for the FT-290R which should be basically similar,
> VR1001 on the MC1496P balanced modulator Q11012 does the carrier balance
> which is probably what you are adjusting.
>
> Going back to radio basics the other item that is involved in the process
> is where the carrier is situated on the SSB IF filter response. The carrier
> is usually placed so that from memory with the lower edge of the IF
> passband (-6dB point) at 300Hz you would expect about -20dB attenuation due to the
> filter action at the carrier frequency (and be able to pass up to 2.7kHz
> at the upper end with a 2.4kHz BW filter). If the carrier placing is offset
> towards the filter passband the carrier null will be reduced and create
> difficulties as you describe. A similar effect could be due to problems with
> the MC1469P + associated components or the SSB IF filter being defective or
> even audio pickup from the microphone TX audio stages upsetting the result.
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> Suggest you first try adjusting the SSB CARRIER POINT ADJUSTMENT according
> to the Instruction Manual and then the CARRIER BALANCE ADJUSTMENT to see if
> improvement is made before going deeper into the problem.
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> the RX antenna input was driven with a noise generator you can build from
> one of the Elecraft Mini Module, N Gen kits: _www.elecraft.com/_
> (http://www.elecraft.com/) . The software was free or shareware up to V5.17 which can
> possibly be still obtained from various sources. With this you see the IF
> response on the PC screen which was a valuable aid when starting from
> scratch.
>
> Regards,
> Bob, G3VVT
>

446. Message from Group Owner - Change to moderation

Yahoo group: electrichandbag
Date: 2011-12-04 13:35:31 UTC
From: electrichandbag-owner@yahoogroups.com
Topic: 446 Message: 446

All,

As of today, i have removed the need for moderation by the owner/moderators for all postings, including new members.

This is an experiment, based on the fact that so far, no members of this group have posted messages that breach house rules, and I have not required to put a member back on moderation.

Please make sure you read and understand the group rules. If in doubt please ask. Anyone posting against the rules, flaming, spamming etc etc will be put back on moderation and may be banned.

Removing the moderation reduces the amount of admin required, but it also requires trust.

Lets keep this group the polite and curteous exchange that it has always been

Regards

Martin G7MRV
Group Owner

447. Newbie with display/freq problems. 290 mk1

Yahoo group: electrichandbag
Date: 2011-12-04 22:17:55 UTC
From: g7vhj
Topic: 447 Message: 447

Hi All,
Thanks for the fantastic group i have gleaned much information already.
I hope someone can help with a problem i have with a mk1 290.
The display is off frequency with the radio, I.E if i want to put out a call on 145:500 the i need the radio to display 145:525 to be on the right frequency.
The radio display is 25KHz off on all modes and whatever frequncy i try.
The Manual suggests that it is the 18MHz x-tal at fault but after changing this i am convinced there is something i am missing.
Is there a variable cap/res that allows the display to be altered to the same freq as the pll?
Many thanks Pete de G7VHJ

448. Re: [electrichandbag] Newbie with display/freq problems. 290 mk1

Yahoo group: electrichandbag
Date: 2011-12-04 23:17:11 UTC
From: Gordon JC Pearce
Topic: 447 Message: 448

On Sun, 04 Dec 2011 22:17:55 -0000
"g7vhj" <g7vhj@...> wrote:

> Hi All,
> Thanks for the fantastic group i have gleaned much information already.
> I hope someone can help with a problem i have with a mk1 290.
> The display is off frequency with the radio, I.E if i want to put out a call on 145:500 the i need the radio to display 145:525 to be on the right frequency.
> The radio display is 25KHz off on all modes and whatever frequncy i try.
> The Manual suggests that it is the 18MHz x-tal at fault but after changing this i am convinced there is something i am missing.
> Is there a variable cap/res that allows the display to be altered to the same freq as the pll?
> Many thanks Pete de G7VHJ

Have you gone through the alignment procedure? I'd take a look at the VCO and ref oscillator sections of that.

The display shows you what the PLL is programmed for. If the reference oscillator or any of the local oscillators are out, the transmit and receive frequencies will be out.

--
Gordon JC Pearce MM0YEQ <gordonjcp@...>

449. Blown PA replacement

Yahoo group: electrichandbag
Date: 2011-12-05 12:19:56 UTC
From: Jim
Topic: 449 Message: 449

Has anyone had to relpace the pa chip in a 290 mk1 as I have a couple of fixer ups all with blown pa's.
My problem is knowing what other parts I need to replace to bring everything back to normal.
I do have some pa chips on order.
I also have a 790 mk1 with the same problem has anyone ever relpaced the chips in both types of radio
regards g1asn

450. Re: Newbie with display/freq problems. 290 mk1

Yahoo group: electrichandbag
Date: 2011-12-05 20:24:37 UTC
From: g7vhj
Topic: 447 Message: 450

--- In electrichandbag@yahoogroups.com, Gordon JC Pearce <gordon@...> wrote:
>
> On Sun, 04 Dec 2011 22:17:55 -0000
> "g7vhj" <g7vhj@...> wrote:
>
> > Hi All,
> > Thanks for the fantastic group i have gleaned much information already.
> > I hope someone can help with a problem i have with a mk1 290.
> > The display is off frequency with the radio, I.E if i want to put out a call on 145:500 the i need the radio to display 145:525 to be on the right frequency.
> > The radio display is 25KHz off on all modes and whatever frequncy i try.
> > The Manual suggests that it is the 18MHz x-tal at fault but after changing this i am convinced there is something i am missing.
> > Is there a variable cap/res that allows the display to be altered to the same freq as the pll?
> > Many thanks Pete de G7VHJ
>
> Have you gone through the alignment procedure? I'd take a look at the VCO and ref oscillator sections of that.
>
> The display shows you what the PLL is programmed for. If the reference oscillator or any of the local oscillators are out, the transmit and receive frequencies will be out.
>
> --
> Gordon JC Pearce MM0YEQ <gordonjcp@...>
>

Thanks for the Advice Gordon,
I must admit i haven't gone through the alignment yet as i was hoping that the fault might have been easier than that,
O.K i guess its time to fire up the sig gen and scope and start probing the board.
regards Pete de G7VHJ

451. Re: [electrichandbag] Blown PA replacement

Yahoo group: electrichandbag
Date: 2011-12-06 06:25:57 UTC
From: Mansueto Grech
Topic: 449 Message: 451

Hi Jim,
I have replaced a few. Usually just replace the PA which by the way is a transistor not one of these hybrid chips. If memory serves me well I believe its a 2SC1947. Again I'd memory serves me well
Please also take note that if the unit has been connected, supply wise, wrongly, check the reverse diode too. Apart from that I have never encountered another faulty components.
Hope I was of some help and please email me if you need other clarifications.
73's and good luck
Mans. 9H1GB
On Dec 5, 2011 1:20 PM, "Jim" <stansfield84@...> wrote:

> **
>
>
> Has anyone had to relpace the pa chip in a 290 mk1 as I have a couple of
> fixer ups all with blown pa's.
> My problem is knowing what other parts I need to replace to bring
> everything back to normal.
> I do have some pa chips on order.
> I also have a 790 mk1 with the same problem has anyone ever relpaced the
> chips in both types of radio
> regards g1asn
>
>
>

453. FL-2010 Linear(?) for FT290Mk1

Yahoo group: electrichandbag
Date: 2011-12-14 08:32:13 UTC
From: zl1ujg
Topic: 453 Message: 453

Hi,
Decided to check the operation of my FL2010 amplifier.
The standing current was a little low.
The manual said 150mA PA collector current. And it was 60 mA. Adjusted that up. With the FT290 driving it at 2.5 w, it maxed out at about 12w at 13.5v.
The manual says a nominal 10W.

I looked at the base DC volts on the decoupled side of the base choke.

Activated, but no RF drive (SSB but not talking), and the volts was 0.7v DC.

With FM drive, similar power expected with SSB PEP, I measured -0.3 volts, while talking to a workmate. I thought I had the meter leads around the wrong way. I was about to change them, but realised they were correct.

I have seen this bias collapse before on 2M PA's and transceivers and most require at least simple transistor and two diode bias.

The Kenwood TS700 suffered from this issue, but it had a 22 ohm in series with the base bias. A simple reconfiguration improved the linearity considerably

The FL2010 PA device is a 2SC2094, which is about 15W max out in a T31-E package.

I will investigate using a 2SC1946A device which has 30+ watts capability with the same package, and is sometimes used in budget 2M PA's of around 30W output.

Kevin

454. Re: FL-2010 Linear(?) for FT290Mk1

Yahoo group: electrichandbag
Date: 2011-12-14 14:47:09 UTC
From: gi0gdp
Topic: 453 Message: 454

Hi Kevin,
To be honest any PA above a few watts should be biased with a temp compensated emitter follower,
regards
Geoff

--- In electrichandbag@yahoogroups.com, "zl1ujg" <zl1ujg@...> wrote:
>
> Hi,
> Decided to check the operation of my FL2010 amplifier.
> The standing current was a little low.
> The manual said 150mA PA collector current. And it was 60 mA. Adjusted that up. With the FT290 driving it at 2.5 w, it maxed out at about 12w at 13.5v.
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>
> I looked at the base DC volts on the decoupled side of the base choke.
>
> Activated, but no RF drive (SSB but not talking), and the volts was 0.7v DC.
>
> With FM drive, similar power expected with SSB PEP, I measured -0.3 volts, while talking to a workmate. I thought I had the meter leads around the wrong way. I was about to change them, but realised they were correct.
>
> I have seen this bias collapse before on 2M PA's and transceivers and most require at least simple transistor and two diode bias.
>
> The Kenwood TS700 suffered from this issue, but it had a 22 ohm in series with the base bias. A simple reconfiguration improved the linearity considerably
>
> The FL2010 PA device is a 2SC2094, which is about 15W max out in a T31-E package.
>
> I will investigate using a 2SC1946A device which has 30+ watts capability with the same package, and is sometimes used in budget 2M PA's of around 30W output.
>
> Kevin
>

455. Re: FL-2010 Linear(?) for FT290Mk1

Yahoo group: electrichandbag
Date: 2011-12-15 04:39:52 UTC
From: zl1ujg
Topic: 453 Message: 455

Hi,
Unfortunately the single diode biaing is all too common, not only with homemade amplifiers, but even commercial "amateur" amplifiers having the diode biasing, even up to reasonable RF power of 50 to 100W.

Many years ago, I modified a MMT144-28 10 watt transverter PA from single diode biasing (with the base DC volts already collapsing) to two diode and emitter follower design.

The results when measuring TX 2-tone IMD were dramatic. The 3rd order was about -32 wrt each tone, and higher orders fell off 10 to 15 dB/ each order from memory.

The original design, I think had -25 dB 3rd order and the higher orders fell off very slowly.

I guess there are still lots of bipolar "linear" :P amplifiers in circulation, and will be for many years to come. FET PAs have made some inroads.

Kevin
ZL1UJG

>
> Hi Kevin,
> To be honest any PA above a few watts should be biased with a temp compensated emitter follower,
> regards
> Geoff

456. The good old FT290R MK1 debate continues

Yahoo group: electrichandbag
Date: 2011-12-25 19:30:04 UTC
From: signalman341
Topic: 456 Message: 456

Hi,
I have just joined the group today and I have read with interest the email trail in respect of the above, it would seem that after all these years thesre must be a common failing that stil eludes us all.

I have just got my other 290 out of the loft , this rig has the above classic fault which I experienced some years ago and placed some comments on eham.

I tried the damping resistor dodgw today and that did'nt work at all, I was pleased that Hanzinzl had placed some pics on this site to confirm that I had correctly located the necessary pads to solder the resistor to.

I have tried several values of resistor from 47K up to 1M and the fault is still there, I do agree with many of the commnebts that this dodge, when it does work is only masking the real problem and indeed could impact on the 290 performance.

I then removed the resistor doge completely, the fault still being apparent and tried out what I did back in 2009.

Like others in this group I found that warming the rig gently with a hair drier in the vicinity of Q1014 seems to clear the problem in the short term, in my case for 10's of seconds, then the fault is back.

Originally in 2009 I could warm the set up in a simialr manner and the fault would clear for quite an amount of time, I could then induce it to return by using freezer spray.

It would seem therefore that the problem lies with one of the semiconductors, which one is question, I am tempted to replace Q1014 with one from a completely dead 290 I bought for spares.

Hopefully I might be able to track this one down as I would like to fix my faulty 290 and also a friend of mine who is experiencing the same.

I'm open to comments, it's nice to have a group like this to bounce ideas off.

Merry Christmas and Great new Year to you all.

Steve

457. Re: [electrichandbag] The good old FT290R MK1 debate continues

Yahoo group: electrichandbag
Date: 2011-12-30 03:12:36 UTC
From: peter Laughton
Topic: 456 Message: 457

Its leakage in the board-remove the transistor and swing it on its legs only-clear of the board. Probably work ok now. My 290 is 32 years old and apart from some crook pin diodes 18 months old, nothing done to it. Its switched on 24/7 in the ute. perhaps thats got something to do with it. Also, mine uses ELNA brand caps, a good jap brand-not chinese.

regards

Peter

From: signalman341 <scj9874@aol.com>
To: electrichandbag@yahoogroups.com
Sent: Monday, 26 December 2011 6:30 AM
Subject: [electrichandbag] The good old FT290R MK1 debate continues

Hi,
I have just joined the group today and I have read with interest the email trail in respect of the above, it would seem that after all these years thesre must be a common failing that stil eludes us all.

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Merry Christmas and Great new Year to you all.

Steve

458. Re: [electrichandbag] The good old FT290R MK1 debate continues

Yahoo group: electrichandbag
Date: 2011-12-30 11:39:22 UTC
From: scj9874@aol.com
Topic: 456 Message: 458

Hi Peter,
thanks for getting back to me, I actually have the 290 on
the bench at the moment. I have found that heating the area around Q1014 up
gently and the fault will go temporarily. I have taken the voltage readings
during fault/no fault conditions and the base of Q1014 does vary quite
considerably from -5.7v (fault) to 1.82v (no fault) both measured with respect
to chassis.

You mention leakage in the board, are we assuming that there is some
contaminent that has caused the electrical leakage.

Steve

In a message dated 30/12/2011 10:57:09 GMT Standard Time,
peterlaughton@... writes:

Its leakage in the board-remove the transistor and swing it on its legs
only-clear of the board. Probably work ok now. My 290 is 32 years old and
apart from some crook pin diodes 18 months old, nothing done to it. Its
switched on 24/7 in the ute. perhaps thats got something to do with it. Also,
mine uses ELNA brand caps, a good jap brand-not chinese.

regards

Peter

From: signalman341 <scj9874@...>
To: electrichandbag@yahoogroups.com
Sent: Monday, 26 December 2011 6:30 AM
Subject: [electrichandbag] The good old FT290R MK1 debate continues

Hi,
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I'm open to comments, it's nice to have a group like this to bounce ideas off.

Merry Christmas and Great new Year to you all.

Steve

459. Re: [electrichandbag] The good old FT290R MK1 debate continues

Yahoo group: electrichandbag
Date: 2011-12-30 23:49:44 UTC
From: peter Laughton
Topic: 456 Message: 459

Whats your pcb board made of ? The early ones were a type of phelonic bakelite which would be hydroscopic. Remove the suspect transistor, cut the board away from around it, then redo the tracks with bits of wire and just hang the trans in mid air by its leads. Use a bit of silicon to support it.
The heating dries the board temporirily and allow correct operation. But as the moisture is already in the whole board, it migrates out to rewet the crook area.
My 290 has a fibreglass board, but the components are not silk screened on it, so I think mine is an early production type.
regards
Peter laughton VK2XAN

_____
From: "scj9874@aol.com" <scj9874@...>
To: electrichandbag@yahoogroups.com
Sent: Friday, 30 December 2011 10:39 PM
Subject: Re: [electrichandbag] The good old FT290R MK1 debate continues

Hi Peter,

thanks for getting back to me, I actually have the 290 on the bench at the moment. I have found that heating the area around Q1014 up gently and the fault will go temporarily. I have taken the voltage readings during fault/no fault conditions and the base of Q1014 does vary quite considerably from -5.7v (fault) to 1.82v (no fault) both measured with respect to chassis.

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Steve

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>
>regards
>
>Peter
>
>
>
>_____

>From: signalman341 <scj9874@...>
>To: electrichandbag@yahoogroups.com
>Sent: Monday, 26 December 2011 6:30 AM
>Subject: [electrichandbag] The good old FT290R MK1 debate continues
>
>
>
>Hi,
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pleased that Hanzinzl had placed some pics on this site to confirm that I had
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tried several values of resistor from 47K up to 1M and the fault is still
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semiconductors, which one is question, I am tempted to replace Q1014 with one
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able to track this one down as I would like to fix my faulty 290 and also a
friend of mine who is experiencing the same.
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>I'm open to comments, it's
nice to have a group like this to bounce ideas off.

>
>Merry Christmas and
Great new Year to you
all.
>
>Steve
>
>
>
>

460. Re: [electrichandbag] The good old FT290R MK1 debate continues

Yahoo group: electrichandbag
Date: 2012-01-01 22:41:14 UTC
From: Mansueto Grech
Topic: 456 Message: 460

Hi Steve,
I too am suffering from the same problem On both mine it is more pronounce during the cold humid winter days. I too am of the opinion that the PCB used in that rig id the main culprit. I also have been given a Somerkamp FT290R " supposedly built in Germany" and in this case it has been unused for a good 15 years yet even though the the top and bottom covers , chassis and the SO239 are corroded to an unusable extend yest I powered it up slowly and believe it or not the unit work fine first go.

Steve I gather that you have a faulty FT290 which you are cannibalising for spares, I wish to ask a favour if you can part with the chassis and SO239, better still top and bottom covers, in order to restore this still fully functioning Somerkamp FT290R, I would be interested to purchase these items. If you can part with these item please contact me off reflector.

Thank you in advance
73's and Happy new year to All
Mans.9H1GB

On 25 December 2011 20:30, signalman341 <scj9874@...> wrote:

> **
>
>
> Hi,
> I have just joined the group today and I have read with interest the email
> trail in respect of the above, it would seem that after all these years
> thesre must be a common failing that stil eludes us all.
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> I have just got my other 290 out of the loft , this rig has the above
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> one from a completely dead 290 I bought for spares.
>
> Hopefully I might be able to track this one down as I would like to fix my
> faulty 290 and also a friend of mine who is experiencing the same.
>
> I'm open to comments, it's nice to have a group like this to bounce ideas
> off.
>
> Merry Christmas and Great new Year to you all.
>
> Steve
>
>
>

461. Re: replacment relays for the 290 mk1

Yahoo group: electrichandbag
Date: 2012-01-09 17:49:18 UTC
From: iv3ddm
Topic: 430 Message: 461

Hi Jim.
Sorry for delay to reply but I have just join this group.

I do not know where you can find the relay, but in the next link, in the second part, you can find a modification to replace the relay with an electronic switch:
http://www.ko4bb.com/Manuals/Yaesu/Yaesu_-_FT-290R/FT290R_mod_it.pdf

In my FT290R, in the past I put a relay of the same size but with different pin, doing the spinning.

I think that soon I'll try the circuit I have indicated to You.

73 Giorgio iv3ddm

--- In electrichandbag@yahoogroups.com, "Jim" <stansfield84@...> wrote:
>
> Hi,
> Does anyone know where there is a supply of Fujitsu relays for the ft290 mk1, the relay in question is RL2001 on the main chassis.
> The part number is M1190001 and the description is FBR211AD009M I have found that this relay is now discontinued by the manufacturers Fujitsu.
> If none are available does anyon have a suggestion as to which relay could be used as a replacement.
> thanks in anticapation jim G1ASN
>

463. SSB drive,lack of

Yahoo group: electrichandbag
Date: 2012-02-06 21:26:25 UTC
From: shaunm6spw
Topic: 463 Message: 463

Hi guys,i have a mint FT-290R2 that i recently acquired,it is doing 2.8watts into a dummy load on FM yet on SSB it only peaks at 0.5w (half a watt) when i speak into the hand mike in a normal voice,yet if i whistle it goes upto 2.5 watts,what im here to ask is there an internal adjustment inside that i can do to improve the SSB drive?
thanks in advance,Shaun.

464. Re: [electrichandbag] SSB drive,lack of

Yahoo group: electrichandbag
Date: 2012-02-06 22:22:32 UTC
From: Geoff Blake
Topic: 463 Message: 464

Thie power levels you speak of are what I would expect. Whereas FM is a constant power mode and 3W (nominal) is right for the FT290R2, on SSB the power is exactly related to the input - or should be!

A whistle is quite a loud tone and can easily drive the 290 to full output and beyond. However the human voice, when speaking, has a quite low power density - connect a microphone to an oscilloscope and look at the relative waveforms. Typically, the average power of the human voice is between 20% and 30% of the peak, when talking continuously (no pauses).

If you increase the microphone gain to increase the average power, the peaks will (want to) increase too. The output stage will not handle this power - if it did they would sell it as a 10W or maybe 20W rig! - and it will distort the transmitted signal. This distortion manifests itself as splatter - a distorted version of your signal perhaps 10kHz wide, maybe more - and it will make you unpopular with other local operators.

To properly measure the output of a SSB transmitter, you need a peak power meter, which does what it says. Unfortunately there are several devices on the market which call themselves a peak power meter, but few read a true peak power.

As I said at the start, and depending on the characteristics of your voice, I would expect to see around 0.5W average power output, exactly as you are getting.

73 Geoff

On 6 February 2012 21:26, shaunm6spw <m6spw@...> wrote:
> Hi guys,i have a mint FT-290R2 that i recently acquired,it is doing 2.8watts into a dummy load on FM yet on SSB it only peaks at 0.5w (half a watt) when i speak into the hand mike in a normal voice,yet if i whistle it goes upto 2.5 watts,what im here to ask is there an internal adjustment inside that i can do to improve the SSB drive?
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#####################################################
Geoff Blake,   G8GNZ    JO01fq:   Chelmsford,  Essex,  UK
<geoff@...>    or   <melecerties@...>
Using Linux: Ubuntu 11.04 on Intel or Debian on UltraSparc
and even on the NAS.     Avoiding Micro$oft like the plague.
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465. Re: SSB drive,lack of

Yahoo group: electrichandbag
Date: 2012-02-06 23:48:34 UTC
From: shaunm6spw
Topic: 463 Message: 465

Hi Geoff,aslog as this is normal for this transceiver then fine,i may have to get the matching 25w linear for this radio then maybe this would enable upto 10w output on SSB,im really chuffed with the 290R2 as its a real nice radio & audio reports so far on FM have been excellent,thanks for your input,Shaun :O)

--- In electrichandbag@yahoogroups.com, Geoff Blake <geoff@...> wrote:
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> a constant power mode and 3W (nominal) is right for the FT290R2, on
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466. Re: [electrichandbag] Re: SSB drive,lack of

Yahoo group: electrichandbag
Date: 2012-02-07 01:20:27 UTC
From: Geoff Blake
Topic: 463 Message: 466

Hi Shaun,

I am afraid that you may be missing the point. Your radio may well be giving the right power out, it is just that your meter is not reading the signal peaks. The 25W linear, if driven to its full output, will produce a peak output of 25 watts, which will be 2-3 S-points higher and outside your licence limit, although you will have to take feeder loss into account.

I would not go looking for a FL2025, they are not that common and I would expect you will have to pay more than it is really worth. Instead, I would save my pennies and perhaps get a FT817 which you may know covers 160 m to 70 cm at 5W or so.

I use my FT290R2 and my FT790R2 as microwave transverter drivers and run them both in the low power mode.

Whereabouts are you, within radio range of Chelmsford?

73 Geoff

On 6 February 2012 23:48, shaunm6spw <m6spw@...> wrote:
> Hi Geoff,aslog as this is normal for this transceiver then fine,i may have to get the matching 25w linear for this radio then maybe this would enable upto 10w output on SSB,im really chuffed with the 290R2 as its a real nice radio & audio reports so far on FM have been excellent,thanks for your input,Shaun :O)
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>> Geoff Blake,   G8GNZ   JO01fq: Chelmsford, Essex, UK
>> <geoff@...>   or   <melecerties@...>
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468. Re: SSB drive,lack of

Yahoo group: electrichandbag
Date: 2012-02-07 11:58:54 UTC
From: shaunm6spw
Topic: 463 Message: 468

Hi Geoff,well im using a Revex W520 meter,its the same as the Welz's & it reads PEP,it reads PEP good enough on my HF sets,so i don't see how it should be any different on the 290R2??
Also the meter on the actual radio only makes it to S1 on the scale when speaking on SSB while on FM it reaches halfway into the red.
As for the linear no im not going out of my way to find one & yes i know they are quite rare now,my fri & end has a microwave modules 25w linear that came with his mk1 290 and he has said i can use it as he don't use it anymore,so i may take him up on his offer,yep i will make sure its not doing anymore than it should do as per terms of my licence,i would'nt want to be like a lot of "G's /M0's" on HF using more than 400w with their big linears now would i ;O) ,
thanks for your help,Shaun :O)

--- In electrichandbag@yahoogroups.com, Geoff Blake <geoff@...> wrote:
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> Whereabouts are you, within radio range of Chelmsford?
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> >> <geoff@> or <melecerties@>
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469. Re: [electrichandbag] Re: SSB drive,lack of

Yahoo group: electrichandbag
Date: 2012-02-07 18:29:27 UTC
From: Geoff Blake
Topic: 463 Message: 469

Hi Shaun,

I don't know the Revex product, however, unless it has an amplifier as part of the peak reading circuitry I would doubt that it has a fast enough attack time to read true peak power. The relative ability to read PEP depends on the coupling factor on each band. The best way to measure the PEP is to use an oscilloscope.

I would go along with the choice of the Microwave Modules amplifier, they were well made and should last if not abused.

Regarding power, I know what you mean, and it is often those who should know better who abuse the system. When I used to run valve linears, my maximum output on 2 m was 350 W or so and about 150 W on 70 cm. Today I cannot much exceed 100 W on any band and I have capability on most bands from 160 m to 3 cm.

73 Geoff

On 7 February 2012 11:29, shaunm6spw <m6spw@...> wrote:
> Hi Geoff,well im using a Revex W520 meter,its the same as the Welz's & it reads PEP,it reads PEP good enough on my HF sets,so i don't see how it should be any different on the 290R2??
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470. Re: SSB drive,lack of

Yahoo group: electrichandbag
Date: 2012-02-07 15:40:08 UTC
From: g0hzu
Topic: 463 Message: 470

Hi Shaun
The Revex 520 is similar to my Welz SP220 power meter.

My Welz is pretty hopeless at measuring true PEP and also on the 2W scale the switchable PEP function doesn't actually do anything different. i.e. it doesn't even add any 'hold' capacitance. I've seen evidence to sugest that the Revex is just as bad.

On the higher ranges eg 20W and 200W it does at least attempt to try and capture 'some idea' of PEP by having a longer time constant after the detector when the PEP function is selected. But it's still pretty poor.

Also, these meters aren't very accurate up at VHF anyway. They are very good across the HF band for measuring CW signals.

The Yaesu YS60 is a very similar looking meter but it does boast an active PEP detector circuit (using opamps) as opposed to the crude and ineffective Welz and Revex that use a totally passive circuit.

So you need to find a better power meter that can indicate PEP.

Regards
Jeremy
G0HZU

--- In electrichandbag@yahoogroups.com, "shaunm6spw" <m6spw@...> wrote:
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> Hi Geoff,well im using a Revex W520 meter,its the same as the Welz's & it reads PEP,it reads PEP good enough on my HF sets,so i don't see how it should be any different on the 290R2??
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> > >> peaks will (want to) increase too. The output stage will not handle
> > >> this power - if it did they would sell it as a 10W or maybe 20W rig! -
> > >> and it will distort the transmitted signal. This distortion manifests
> > >> itself as splatter - a distorted version of your signal perhaps 10kHz
> > >> wide, maybe more - and it will make you unpopular with other local
> > >> operators.
> > >>
> > >> To properly measure the output of a SSB transmitter, you need a peak
> > >> power meter, which does what it says. Unfortunately there are several
> > >> devices on the market which call themselves a peak power meter, but
> > >> few read a true peak power.
> > >>
> > >> As I said at the start, and depending on the characteristics of your
> > >> voice, I would expect to see around 0.5W average power output, exactly
> > >> as you are getting.

> > >>
> > >> 73 Geoff
> > >>
> > >> On 6 February 2012 21:26, shaunm6spw <m6spw@> wrote:
> > >> > Hi guys,i have a mint FT-290R2 that i recently acquired,it is doing 2.8watts into a dummy load on FM yet on SSB it only peaks at 0.5w (half a watt) when i speak into the hand mike in a normal voice,yet if i whistle it goes upto 2.5 watts,what im here to ask is there an internal adjustment inside that i can do to improve the SSB drive?
> > >> > thanks in advance,Shaun.
> > >> >
> > >> >
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> > >> > Yahoo! Groups Links
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> > >> --
> > >> ##
> > >> Geoff Blake,   G8GNZ   JO01fq: Chelmsford, Essex, UK
> > >> <geoff@>   or   <melecerties@>
> > >> Using Linux: Ubuntu 11.04 on Intel or Debian on UltraSparc
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> > ##
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>

471. Re: SSB drive,lack of

Yahoo group: electrichandbag
Date: 2012-02-08 19:04:38 UTC
From: g3vvt@aol.com
Topic: 463 Message: 471

Hi Shaun,

Most of the RF power meters that are said to display PEP do not and to this your Revex W520 is no exception. All that is done when you switch to PEP is that an electrolytic capacitor is placed across the meter that raises the averages of the voltage applied. With heavy compression it will seem like the meter is indicating PEP where in fact this is not really the case. Even some that have to be supplied with 12v may only use this for a lamp rather than supply a proper peak level indicator and hold circuit. Out of all the RF power meters available on the market very few actually indicate PEP.

However it is possible to modify RF power meters to indicate PEP with an add on circuit, though currently the only one that seems to be on the market presently is for the Bird 43 Thruline RF wattmeter.

In the past a small ready built PCB was available from a company in N Wales called Technical Software at £12 inclusive. Aged users of the BBC computer may remember this company as suppliers of RTTY/Slow Scan software and interfaces for the BBC computer. This unit went off the market a long time back, but there was an article by John Fielding, GW4NAH in Radio Communication magazine of January 1989 on P48 that also gave the circuit diagram which could help one to duplicate the unit. Sadly the callsign of GW3NAH nor that of the proprietor of Technical Software are any longer listed, so may be both SK? I purchase a few of these circuit boards when they were available and have one installed in a JRC ATU plus another in a old KW PEPMETER, PEP test set that has it's own two tone generator built in. Both seem to work very well though in the devices used are only suitable for HF use. Compared to a Weston Electronics PM-2000 HF PEP meter I have in the shack they seem to be reasonably comparable.

Have an old Heathkit HM-2102 VHF power meter that also does not read PEP, so thinking about building my own copy of the circuit on Veroboard as SSB is used here on both 2m and 4m. Nothing special about the components apart from maybe a 1uF 63V poly capacitor which is not normally found in the average junk box. Uses a 358 series dual op-amp and probably could be just as well the LM324 or similar. There is an error on the given circuit as two RF decoupling capacitors are missing compared to the original built PCB as supplied. I still have the original instruction sheets that came with the PCB in my document files.

Regards,
Bob, G3VVT

472. Re: SSB drive,lack of

Yahoo group: electrichandbag
Date: 2012-02-09 12:47:42 UTC
From: shaunm6spw
Topic: 463 Message: 472

Thanks for all your help guys,i did'nt expect miracles from the revex,but i now know they are not the best & the reasons for it,still can somebody please explain why the meter on the radio itself only goes upto an S1 on SSB in normal speech,then it goes into the red on FM,surely it should peak more than S1 on the meter on SSB???
and is there an internal adjustment to make it do better? thanks,Shaun :O)

--- In electrichandbag@yahoogroups.com, g3vvt@... wrote:
>
> Hi Shaun,
>
> Most of the RF power meters that are said to display PEP do not and to
> this your Revex W520 is no exception. All that is done when you switch to PEP
> is that an electrolytic capacitor is placed across the meter that raises the
> averages of the voltage applied. With heavy compression it will seem like
> the meter is indicating PEP where in fact this is not really the case.
> Even some that have to be supplied with 12v may only use this for a lamp rather
> than supply a proper peak level indicator and hold circuit. Out of all the
> RF power meters available on the market very few actually indicate PEP.
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> However it is possible to modify RF power meters to indicate PEP with an
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> and have one installed in a JRC ATU plus another in a old KW PEPMETER, PEP
> test set that has it's own two tone generator built in. Both seem to work
> very well though in the devices used are only suitable for HF use. Compared
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> decoupling capacitors are missing compared to the original built PCB as

> supplied. I still have the original instruction sheets that came with the PCB in
> my document files.
>
> Regards,
> Bob, G3VVT
>

473. Re: [electrichandbag] Re: SSB drive,lack of

Yahoo group: electrichandbag
Date: 2012-02-09 17:20:25 UTC
From: Geoff Blake
Topic: 463 Message: 473

Hi Shaun,

The meter on the radio reads carrier level, thus on FM it reads full, whereas on normal SSB speech it reads between 20 and 33%. I would point out that the meter is only a "guessing-stick" and is in no way accurate! The meter itself is probably linear to about 10% but that of the driving circuitry is anybody's guess.

This topic comes up every month or three on the FT817 and FT897 yahoo lists. It is often presaged with a post saying on (say) 100W, my "super dooper" power meter only reads 95 W when the output is set to 100 W. Few people seem to realise that a professional in-line power meter, like a Bird 43 or similar has a typical accuracy of +/- 10% of FSD. To measure RF power to better than a few % needs cal. lab. conditions and equipment. In my experience I would not trust a typical amateur power meter to read better that +/- 20% on a good day.

73 Geoff

On 9 February 2012 12:47, shaunm6spw <m6spw@...> wrote:
> Thanks for all your help guys,i did'nt expect miracles from the revex,but i now know they are not the best & the reasons for it,still can somebody please explain why the meter on the radio itself only goes upto an S1 on SSB in normal speech,then it goes into the red on FM,surely it should peak more than S1 on the meter on SSB???
> and is there an internal adjustment to make it do better? thanks,Shaun :O)
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> --- In electrichandbag@yahoogroups.com, g3vvt@... wrote:
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>> Hi Shaun,
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>> presently is for the Bird 43 Thruline RF wattmeter.
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>> both SK? I purchase a few of these circuit boards when they were available
>> and have one installed in a JRC ATU plus another in a old KW PEPMETER, PEP
>> test set that has it's own two tone generator built in. Both seem to work
>> very well though in the devices used are only suitable for HF use. Compared
>> to a Weston Electronics PM-2000 HF PEP meter I have in the shack they seem
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>>
>> Have an old Heathkit HM-2102 VHF power meter that also does not read PEP,
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>> from maybe a 1uF 63V poly capacitor which is not normally found in the
>> average junk box. Uses a 358 series dual op-amp and probably could be just as
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>> decoupling capacitors are missing compared to the original built PCB as
>> supplied. I still have the original instruction sheets that came with the PCB in
>> my document files.
>>
>> Regards,
>> Bob, G3VVT
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##
Geoff Blake, G8GNZ JO01fq: Chelmsford, Essex, UK
<geoff@...> or <melecerties@...>
Using Linux: Ubuntu 11.04 on Intel or Debian on UltraSparc
and even on the NAS. Avoiding Micro$oft like the plague.
##

474. Re: SSB drive,lack of

Yahoo group: electrichandbag
Date: 2012-02-10 11:18:06 UTC
From: gi0gdp
Topic: 463 Message: 474

If this question comes up so often then perhaps the Foundation/Intermediate syllabus needs looking at?

Anyway the Revex meter wont read "PEP" on its low power setting.
On the other 2 setting ranges it attempts to measure PEP with said capacitor and reads low, often 60-70% of the expected value

If there aren't any IP issues with the previously mentioned pep pcb and circuit i think it would be a good idea if i was to scan it and put it into the files section so others can build it.
This will go some of the way to giving better readings on SSB,

regards
Geoff Pike

475. Re: [electrichandbag] Re: SSB drive,lack of

Yahoo group: electrichandbag
Date: 2012-02-10 12:43:47 UTC
From: Geoff Blake
Topic: 463 Message: 475

To be fair, the vast majority of questioners were not UK Licencees...

73 Geoff

On 10 February 2012 11:18, gi0gdp <gi0gdp@...> wrote:
>
>
> If this question comes up so often then perhaps the Foundation/Intermediate syllabus needs looking at?
>
> Anyway the Revex meter wont read "PEP" on its low power setting.
> On the other 2 setting ranges it attempts to measure PEP with said capacitor and reads low, often 60-70% of the expected value
>
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> regards
> Geoff Pike
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Geoff Blake, G8GNZ JO01fq: Chelmsford, Essex, UK
<geoff@...> or <melecerties@...>
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##

478. Re: [electrichandbag] Re: SSB drive,lack of

Yahoo group: electrichandbag
Date: 2012-02-12 00:17:55 UTC
From: Andrew Davis
Topic: 463 Message: 478

Shaun,

For what it's worth I use a rule of thumb when watching a meter using ssb voice. If I have set a full scale power level using a tone, CW or FM mode, then I expect to see a typical SWR/power meter show about 1/3 of full scale reading when using voice and using the international standard test sound "aaaaaaaaaaaahhhhhhhhhhh".   :)

This works because the meter shows the average power level, and the voice waveform is not constant, the level fluctuates continously. If the meter shows any more than full scale on voice, it usually indicates overdriving which usually results in splatter, ie interference to adjacent frequencies.

If you look at a meter calibrated in watts, 1/3 of the voltage reading corresponds to about 1/9 of the power reading. power is proportional to the square of voltage. Meters read voltage.

This echos the advice given earlier, that a low apparent reading is probably quite ok and does not indicate anything wrong with the transmitter. It was good advice.

As far as the power level that's safe with the FT290R on FM, I strongly suggest sticking with the manufacturer's settings. With transistors, you can have rated power for a long time, or higher than rated power for a short time, choose which you prefer.

73

Andrew Davis
VK1DA Canberra --- VK2UH Yass
web:vk1da.info, vkfaq.ampr.org

From: shaunm6spw <m6spw@...>
To: electrichandbag@yahoogroups.com
Sent: Sunday, 12 February 2012 2:30 AM
Subject: [electrichandbag] Re: SSB drive,lack of

Hi Geoff,just done some tests using my ft-950 on the 100w setting into a dummy load & you are right mate,the Revex only reads about 70w PEP,so thats your point proven mate as far as im concerned,so i would guess my ft-290R2 is doing nearer 1w PEP on SSB rather than 0.5w as the Revex meter was telling me,was gonna ask,what is the
safe level for me to set the power output to on fm via the internal ALC VR? as i know about the s point to db factor,but what is the safest maximum power output the 2sc1971 transistor can be driven at?? as i have seen the spec for this transistor is 6w,so would it be safe to run it at 4-5w?? thanks a naive M6 ;O),regards,Shaun.

--- In electrichandbag@yahoogroups.com, Geoff Blake <geoff@...> wrote:
>

> To be fair, the vast majority of questioners were not UK Licencees...
>
> 73 Geoff
>
> On 10 February 2012 11:18, gi0gdp <gi0gdp@...> wrote:
> >
> >
> > If this question comes up so often then perhaps the Foundation/Intermediate syllabus needs looking at?
> >
> > Anyway the Revex meter wont read "PEP" on its low power setting.
> > On the other 2 setting ranges it attempts to measure PEP with said capacitor and reads low, often 60-70% of the expected value
> >
> > If there aren't any IP issues with the previously mentioned pep pcb and circuit i think it would be a good idea if i was to scan it and put it into the files section so others can build it.
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> > Geoff Pike
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> > Yahoo! Groups Links
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> Geoff Blake,   G8GNZ   JO01fq: Chelmsford, Essex, UK
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>

479. Re: [electrichandbag] Re: SSB drive,lack of

Yahoo group: electrichandbag
Date: 2012-02-12 02:36:43 UTC
From: Andrew Davis
Topic: 463 Message: 479

Correction: in para 2 I wrote "any more than full scale" but I meant to write "any more than half of full scale".

Andrew Davis
VK1DA Canberra --- VK2UH Yass
web:vk1da.info, vkfaq.ampr.org

From: Andrew Davis <andrew73@yahoo.com>
To: "electrichandbag@yahoogroups.com" <electrichandbag@yahoogroups.com>
Sent: Sunday, 12 February 2012 11:17 AM
Subject: Re: [electrichandbag] Re: SSB drive,lack of

Shaun,

For what it's worth I use a rule of thumb when watching a meter using ssb voice. If I have set a full scale power level using a tone, CW or FM mode, then I expect to see a typical SWR/power meter show about 1/3 of full scale reading when using voice and using the international standard test sound "aaaaaaaaaaaahhhhhhhhhhh". :)

This works because the meter shows the average power level, and the voice waveform is not constant, the level fluctuates continously. If the meter shows any more than full scale on voice, it usually indicates overdriving which usually results in splatter, ie interference to adjacent frequencies.

If you look at a meter calibrated in watts, 1/3 of the voltage reading corresponds to about 1/9 of the power reading. power is proportional to the square of voltage. Meters read voltage.

This echos the advice given earlier, that a low apparent reading is probably quite ok and does not indicate anything wrong with the transmitter. It was good advice.

As far as the power level that's safe with the FT290R on FM, I strongly suggest sticking with the manufacturer's settings. With transistors, you can have rated power for a long time, or higher than rated power for a short time, choose which you prefer.

73

Andrew Davis
VK1DA Canberra --- VK2UH Yass
web:vk1da.info, vkfaq.ampr.org

From: shaunm6spw <m6spw@...>
To: electrichandbag@yahoogroups.com
Sent: Sunday, 12 February 2012 2:30 AM

Subject: [electrichandbag] Re: SSB drive,lack of

Hi Geoff,just done some tests using my ft-950 on the 100w setting into a dummy load & you are right mate,the Revex only reads about 70w PEP,so thats your point proven mate as far as im concerned,so i would guess my ft-290R2 is doing nearer 1w PEP on SSB rather than 0.5w as the Revex meter was telling me,was gonna ask,what is the
safe level for me to set the power output to on fm via the internal ALC VR? as i know about the s point to db factor,but what is the safest maximum power output the 2sc1971 transistor can be driven at?? as i have seen the spec for this transistor is 6w,so would it be safe to run it at 4-5w?? thanks a naive M6 ;O),regards,Shaun.

--- In electrichandbag@yahoogroups.com, Geoff Blake <geoff@...> wrote:
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480. Re: SSB drive,lack of

Yahoo group: electrichandbag
Date: 2012-02-12 15:36:44 UTC
From: g3vvt@aol.com
Topic: 463 Message: 480

Hi Shaun,

The power setting on the FT-290R can be whatever your heart's desire, but comes at a price!

Depends how good you are at sourcing new PA transistors and have the ability to change them. Maybe also have to reset the biasing to cope with any parameter changes of the new PA transistor that on an odd occasion may be needed.

Yaesu give instruction in the FT-290R manual on how to set the PA power output at 2.5W on FM using the ALC control for good reason and that is to ensure that the radio gives long and reliable service.
Have seen this idea pop up over the years with various low power portable radios where some individual believes they know better than the manufacturers. The last one was with the Yaesu FT-817 where understand this resulted in a rash of PA failures. If the manufacturers believed it was safe to run at a higher power you could safely bet that they would do it.

The instruction manual for the FT-290R (mk1) was really a gem as it has included all the instructions need for quite a number of parameter checks and adjustments together with the circuit diagrams that was not provided in later manuals from the FT-290 mk2 onwards.

Regards,
Bob, G3VVT

481. Re: [electrichandbag] Re: SSB drive,lack of

Yahoo group: electrichandbag
Date: 2012-02-12 22:16:52 UTC
From: Geoff Blake
Topic: 463 Message: 481

Hi Shaun, group,

I would always observe the manufacturers design figures, i.e. 3 W. I would keep to this level not because of the rating of the PA transistor but the ratings of the PA circuitry as a whole. One big limitation is the heat-sinking of the PA transistor and another is VSWR protection. If you think about it, any reflected signal back from the aerial/load appears in the PA transistor (normally there is nowhere else for it to go) and adds to the dissipation. The designers choose their numbers for good reason. If you overrun the PA you do it at your own risk.

Back in the days of valve equipment there used to be two sets or ratings CCS - continuous commercial service - and ICAS - intermittent commercial and amateur service. However valves are much more tolerant of short-term overload, transistors are just fast fuses. HF rigs like the FT101, particularly those that run "TV sweep tubes" like the 6JS6 and the 6LQ6 run them at quite high levels, exceeding their design ratings somewhat, especially as they are not designed for such usage. It is OK (?) for SSB, where the mean power is perhaps 30% of the peak, but on FM overrunning the PA is a valve/transistor killer.

Most digital signals are continuous signal modes and thus it is good advice to run the radio at typically 30% of full output. Part of this reduction in output power is to improve the signal quality, important on most digital modes, but also to protect the PA stage. Of course, modes like PSK31 etc. require much lower power.....

Finally, I would not consider you naive, you are learning and ask advice, that is important. When I was first licenced (40 plus years back) I had the advantage of having worked about 10 years in electronics, much of that on transmitting kit. However, I still learned to be cautious the hard way!! Also the only stupid question is the unasked one!!!

Good luck & 73

Geoff

On 11 February 2012 15:28, shaunm6spw <m6spw@...> wrote:
> Hi Geoff,just done some tests using my ft-950 on the 100w setting into a dummy load & you are right mate,the Revex only reads about 70w PEP,so thats your point proven mate as far as im concerned,so i would guess my ft-290R2 is doing nearer 1w PEP that 0.5w as the Revex meter was telling me,was gonna ask,what is the safe level for me to set the power output to on fm via the internal ALC VR? as i know about the s point to db factor,but what is the safest maximum power output the 2sc1971 transistor can be driven at?? as i have seen the spec for this transistor is 6w,so would it be safe to run it at 4-5w?? thanks a naive M6

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482. Identifying the microphone

Yahoo group: electrichandbag
Date: 2012-02-15 00:04:03 UTC
From: chuckbland
Topic: 482 Message: 482

I just had the pleasure of acquiring a 290R-II.

It has the "standard" mic with just the UP, DWN, FST buttons. The little plate on the back where the slider switch is, is gone.

I'm lookin' for docs on the mic and info about the switch.

Can anyone help?

Chuck
NA6BR

483. Re: Identifying the microphone

Yahoo group: electrichandbag
Date: 2012-02-15 13:33:36 UTC
From: g3vvt@aol.com
Topic: 482 Message: 483

Hi Chuck,

A long time since have last seen your email address, possibly from the days when building the Elecraft K2 in 2004 which still has an important place in my shack.

The service notes I have for the FT-290RII give no clue to the microphone internal wiring apart it was supplied with the usual signal lines, though with the 8 pin Foster plug. With the plate missing is even more difficult as could either be the correct MH-10EB or the similar type used on HF with the FT101 series which was the MH-1B8 as they are externally very similar. With the correct microphone the function of the switch is LOCK with the OFF position to the left looking at it face on. This disables the UP, DOWN and FAST buttons. With the HF version this becomes a tone switch that changes the audio bandwidth quality, so the difference should be fairly obvious. For the YM-47 used in the FT-290R, the switch made contact with the PTT ground for the UP/DOWN buttons when enable ON.

Had to telephone an old friend of mine on one of our offshore islands who has the same radio to find the differences. If you need any further help can call him again to find if there is a diagram for the microphone in the FT290RII Instruction Manual. Presume the microphone could be fairly easily modified if it is the HF variant. Have a brand new MH-1B8 bought as a spare many years ago for reference.
Regards,
Bob, G3VVT

484. Re: Identifying the microphone

Yahoo group: electrichandbag
Date: 2012-02-15 19:07:18 UTC
From: chuckbland
Topic: 482 Message: 484

This must be a tone switch. There is a capacitor mounted on the back of the switch. I was guessing it had that kind of function. I'll search the model numbers and see what I come up with.

Thanks for the pointers.

Your recollection of the K2 link is correct. I was on that list for quite a while and only dropped because I wasn't reading it. My K2 works, so I didn't see the need to lurk the list.

Thanks again for your reply.

Chuck

--- In electrichandbag@yahoogroups.com, g3vvt@... wrote:
>
> Hi Chuck,
>
> A long time since have last seen your email address, possibly from the days
> when building the Elecraft K2 in 2004 which still has an important place
> in my shack.
>
> The service notes I have for the FT-290RII give no clue to the microphone
> internal wiring apart it was supplied with the usual signal lines, though
> with the 8 pin Foster plug. With the plate missing is even more difficult as
> could either be the correct MH-10EB or the similar type used on HF with
> the FT101 series which was the MH-1B8 as they are externally very similar.
> With the correct microphone the function of the switch is LOCK with the
> OFF position to the left looking at it face on. This disables the UP, DOWN
> and FAST buttons. With the HF version this becomes a tone switch that changes
> the audio bandwidth quality, so the difference should be fairly obvious.
> For the YM-47 used in the FT-290R, the switch made contact with the PTT
> ground for the UP/DOWN buttons when enable ON.
>
> Had to telephone an old friend of mine on one of our offshore islands who
> has the same radio to find the differences. If you need any further help
> can call him again to find if there is a diagram for the microphone in the
> FT290RII Instruction Manual. Presume the microphone could be fairly easily
> modified if it is the HF variant. Have a brand new MH-1B8 bought as a spare
> many years ago for reference.
> Regards,
> Bob, G3VVT
>

485. Re: Identifying the microphone

Yahoo group: electrichandbag
Date: 2012-02-15 21:49:22 UTC
From: Jim
Topic: 482 Message: 485

hi chuck a local ham has the same radio bought as original
the plate on the back of his microphone is''MH10'' i hope this helps
regards g1asn

--- In electrichandbag@yahoogroups.com, "chuckbland" <BackForty@...> wrote:
>
> I just had the pleasure of acquiring a 290R-II.
>
> It has the "standard" mic with just the UP, DWN, FST buttons. The little plate on the back where the slider switch is, is gone.
>
> I'm lookin' for docs on the mic and info about the switch.
>
> Can anyone help?
>
> Chuck
> NA6BR
>

486. Re: [electrichandbag] Identifying the microphone

Yahoo group: electrichandbag
Date: 2012-02-15 08:18:22 UTC
From: Nick Tsakonas
Topic: 482 Message: 486
Attachments: 2 described; binary payloads are missing from this source WARC

Hello Chuck,

I have an FT-290R-II which I bought used. It came with a microphone that does not have a FAST button, but my FT-890's mic has a FAST button.

see the images on these links, maybe you can recognize your microphone

this is the original FT-890 microphone

http://www.universal-radio.com/catalog/hamhf/MH1B8.jpg
http://www.mods.dk/picture.php?brandid=7&model=mh-1

and this is the original FT-290RII microphone
http://www.universal-radio.com/catalog/hammulti/ft290rii.html
http://www.mods.dk/picture.php?brandid=7&model=mh-10e8

also see the attached files for info on each one of them. They are excerpts from their manuals.

also, have keep this link handy...

http://redlk2.es/files/micros.pdf

Does this help you? If you want more info, tell me and I can check the specifics at home.

73, Nick, SV1DJG

From: chuckbland <BackForty@BlandRanch.net>
To: electrichandbag@yahoogroups.com
Sent: Wednesday, February 15, 2012 2:04 AM
Subject: [electrichandbag] Identifying the microphone

I just had the pleasure of acquiring a 290R-II.

It has the "standard" mic with just the UP, DWN, FST buttons. The little plate on the back where the slider switch is, is gone.

I'm lookin' for docs on the mic and info about the switch.

Can anyone help?

Chuck
NA6BR

487. Re: Identifying the microphone

Yahoo group: electrichandbag
Date: 2012-02-17 02:52:27 UTC
From: Jeff Herhold
Topic: 482 Message: 487

Hi Chuck!

I have one of these fine little rigs, and the microphone that came with it has the label on the front. It is a DTMF Microphone, model MH-15CB. The lock switch on the back works correctly, so I assume it is the original version.

Jeff WI7D

Re: Identifying the microphone
<http://groups.yahoo.com/group/electrichandbag/message/485;_ylc=X3oDMTJxNWV2cnRwBF9TAzk3MzU5NzE1BGdycElkAzE5NzE4MDA5BGdycHNwSWQDMTcwNTA2MzEwOARtc2dJZAM0ODUEc2VjA2Rtc2cEc2xrA3Ztc2cEc3RpbWUDMTMyOTM4ODk4Nw-->
Posted by: "Jim" stansfield84@...
<mailto:stansfield84@...?Subject=%20Re%3A%20Identifying%20the%20microphone> stansfield84@...
<http://profiles.yahoo.com/stansfield84@...>
Wed Feb 15, 2012 1:49 pm (PST)

hi chuck a local ham has the same radio bought as original
the plate on the back of his microphone is''MH10'' i hope this helps
regards g1asn

--- In electrichandbag@yahoogroups.com
<mailto:electrichandbag%40yahoogroups.com> , "chuckbland" <BackForty@...>
wrote:
>
> I just had the pleasure of acquiring a 290R-II.
>
> It has the "standard" mic with just the UP, DWN, FST buttons. The little plate on the back where the slider switch is, is gone.
>
> I'm lookin' for docs on the mic and info about the switch.
>
> Can anyone help?
>
> Chuck
> NA6BR
>

488. Re: Identifying the microphone

Yahoo group: electrichandbag
Date: 2012-02-17 07:18:31 UTC
From: Jose M.
Topic: 482 Message: 488

Hi Chuck and all the group.

Since I was trying to fix an SSB transmitting bug in a friend´s FT-290 R-II, I have a drawing of the MH-10FB, original mic on this radio.

It is hand drawn (sorry), but readable and I think would be helpful for somebody.
I´ve just uploaded it to the group´s Files folder.

Best 73 de EA1EBJ
(San)

489. New file uploaded to electrichandbag

Yahoo group: electrichandbag
Date: 2012-02-17 15:28:08 UTC
From: electrichandbag@yahoogroups.com
Topic: 2 Message: 489

Hello,

This email message is a notification to let you know that
a file has been uploaded to the Files area of the electrichandbag
group.

File : /Sideband PEP.pdf
Uploaded by : gi0gdp <gi0gdp@...>
Description : Radcom Article on PEP

You can access this file at the URL:
http://groups.yahoo.com/group/electrichandbag/files/Sideband%20PEP.pdf

To learn more about file sharing for your group, please visit:
http://help.yahoo.com/l/us/yahoo/groups/original/members/web/index.html
Regards,

gi0gdp <gi0gdp@...>

490. Problem with UP and DWN buttons

Yahoo group: electrichandbag
Date: 2012-02-17 20:37:04 UTC
From: chuckbland
Topic: 490 Message: 490

Using the MH-10E (non-DTMF) mic, I'm finding the UP and DWN buttons aren't working.

According to schematics I've found, the mic is wired correctly internally and to the radio. When one of the buttons is pushed, it connects to the B+ line. All the switches are closing and nothing is happening.

If I disconnect the mic and short either the UP or DWN lead to ground, the radio does respond.

It is almost like the mic should be feeding GND instead of B+ to those switches.

I'm also wondering if I don't have the wrong mic.

Any opinions?

Chuck
NA6BR

493. NC-11 charger

Yahoo group: electrichandbag
Date: 2012-02-29 10:35:25 UTC
From: briandowner2003
Topic: 493 Message: 493

Hi,

I have just aquires a FT-290R mk 1 without a charger. I notice from the circuit the charger connects via a diode directly to the batteries therfore any charging circuitry would be in the NC-11.

I have looked at all the files online but cannot see any info on the internals of the NC-11, is it just a series resistor as most early chargers?

Many thanks

Brian G3ZQI

494. Replacement Capacitor Pack for the FT 290R

Yahoo group: electrichandbag
Date: 2012-02-29 12:01:45 UTC
From: Jon
Topic: 494 Message: 494

Could anyone tell me if there is a supplier of an "electrolytic capacitor replacement pack" for the FT 290 to replace all the 20+ year old capacitors that have started themselves to go into retirement! I have seen something similar for other rigs, but not managed to find anything for the "old faithful".

I am aware that there are a number of articles about fitting the replacements and curing the slow warm up problem, but could someone reference an article for me or just tell me where they exist in the archive.

Many thanks

495. Re: [electrichandbag] NC-11 charger

Yahoo group: electrichandbag
Date: 2012-02-29 12:04:19 UTC
From: Hector Pascal
Topic: 493 Message: 495

My NC11 charger failed so I dismantled it. To the best of my recollection, it was a simple centre tap transformer with 2 diodes and a capacitor on a pcb for full wave rectification. It may also have had a fuse (?). It probably relied on the poor regulation of the transformer to keep the charging current reasonably constant for NiCads. If I can find the parts again, I'll give you some further information.

David, VK6JT

On Wed, Feb 29, 2012 at 6:35 PM, briandowner2003 <brian@...> wrote:

> **
>
>
> Hi,
>
> I have just aquires a FT-290R mk 1 without a charger. I notice from the
> circuit the charger connects via a diode directly to the batteries therfore
> any charging circuitry would be in the NC-11.
>
> I have looked at all the files online but cannot see any info on the
> internals of the NC-11, is it just a series resistor as most early chargers?
>
> Many thanks
>
> Brian G3ZQI
>
>
>

496. Re: [electrichandbag] NC-11 charger

Yahoo group: electrichandbag
Date: 2012-03-01 02:22:06 UTC
From: Hector Pascal
Topic: 493 Message: 496

OK Brian, it was even simpler than I remembered!

Plate on charger says NC11-C NiCd Battery Charger
input AC220/234 50/60 Hz 6VA
output DC 11.6V 150mA. plug tip is shown +ve, outer -ve
inside it:
Double insulated transformer type DE-122C
Single secondary winding. One secondary side goes directly to the outer of the "dc"plug.
The other secondary side goes via a 315mA type T 20mm fuse to the anode of a 1N4001 diode.
Cathode of the diode goes to tip of "dc" plug.

I am more and more convinced that this is only "constant" current if the voltage sags due to higher current draw in a poorly regulated transformer!

David, VK6JT

On Wed, Feb 29, 2012 at 8:04 PM, Hector Pascal <hector.pascal@...>wrote:

> My NC11 charger failed so I dismantled it. To the best of my
> recollection, it was a simple centre tap transformer with 2 diodes and a
> capacitor on a pcb for full wave rectification. It may also have had a fuse
> (?). It probably relied on the poor regulation of the transformer to keep
> the charging current reasonably constant for NiCads. If I can find the
> parts again, I'll give you some further information.
>
> David, VK6JT
>
>
> On Wed, Feb 29, 2012 at 6:35 PM, briandowner2003 <brian@...> wrote:
>
>> **
>>
>>
>> Hi,
>>
>> I have just aquires a FT-290R mk 1 without a charger. I notice from the
>> circuit the charger connects via a diode directly to the batteries therfore
>> any charging circuitry would be in the NC-11.
>>
>> I have looked at all the files online but cannot see any info on the
>> internals of the NC-11, is it just a series resistor as most early chargers?
>>
>> Many thanks
>>

>> Brian G3ZQI
>>
>>
>>
>
>

497. Re: NC-11 charger

Yahoo group: electrichandbag
Date: 2012-03-01 07:29:46 UTC
From: briandowner2003
Topic: 493 Message: 497

Hi David,

Many thanks for the excellent info, as I thought it the cheap type of the charger often seen in those days. As you say it probably relies on the transformer to provide the constant current (HI) and the user to disconnect after the prescribed 14 hours

I will probably build a better one to extend the life of the batteries.

73 de brian G3ZQI

498. Re: Replacement Capacitor Pack for the FT 290R

Yahoo group: electrichandbag
Date: 2012-03-01 22:00:58 UTC
From: zaktherabbit
Topic: 494 Message: 498

Im not aware of any such packs,

Hmmm, i'll take a look at what would be required

Martin

--- In electrichandbag@yahoogroups.com, "Jon" <jje_richardson@...> wrote:
>
> Could anyone tell me if there is a supplier of an "electrolytic capacitor replacement pack" for the FT 290 to replace all the 20+ year old capacitors that have started themselves to go into retirement! I have seen something similar for other rigs, but not managed to find anything for the "old faithful".
>
> I am aware that there are a number of articles about fitting the replacements and curing the slow warm up problem, but could someone reference an article for me or just tell me where they exist in the archive.
>
> Many thanks
>

499. Re: [electrichandbag] Re: Replacement Capacitor Pack for the FT 290R

Yahoo group: electrichandbag
Date: 2012-03-01 22:57:38 UTC
From: Gordon JC Pearc e
Topic: 494 Message: 499

On 01/03/12 22:00, zaktherabbit wrote:
> Im not aware of any such packs,
>
> Hmmm, i'll take a look at what would be required
>

More disc ceramics and fewer electrolytics than you'd suspect... ;-)

--
Gordon JC Pearce MM0YEQ

500. Re: [electrichandbag] Re: NC-11 charger

Yahoo group: electrichandbag
Date: 2012-03-01 22:16:36 UTC
From: geoffrey mendelson
Topic: 493 Message: 500

On Mar 1, 2012, at 9:29 AM, briandowner2003 wrote:

> Many thanks for the excellent info, as I thought it the cheap type
> of the charger often seen in those days. As you say it probably
> relies on the transformer to provide the constant current (HI) and
> the user to disconnect after the prescribed 14 hours
>
> I will probably build a better one to extend the life of the
> batteries.
>

That charger is based on the properties of Ni-Cad batteries. If you dump a small amount of current into them, they will charge and it would take days to cook them, if at all. High current chargers o the era worked by pushing large currents into the battery packs, and stopping when the circuit was broken, usually by a temperature sensor. Usually it works, but I have many NiCad battery packs that were "cooked"by that method.

Modern chargers use a more sophisticated method, by monitoring the voltage of the cells.

This is absolutely required for NiMH cells.

I have the FT-290 Mark II, and I replaced the the C NiCads that were in it with 2500mah NiMH slow discharge AA batteries in plastic sleeves to make them fit. The positive tip of the AA batteries is too short to work in the case, so I had to add washers to make contact.

I charge them in the pack with a NiMH battery charger I got for $15 off of eBay. It senses how many cells and adjust the voltage and current and shuts off when they are full, before they begin to heat up.

I probably could get C NiMH batteries, but they are not available except as AA batteries in C size cases, at C sized prices, and buying the off of eBay involves expensive postage as they are relatively heavy.

Geoff.

--
Geoffrey S. Mendelson, N3OWJ/4X1GM
My high blood pressure medicine reduces my midichlorian count. :-(

501. Re: NC-11 charger

Yahoo group: electrichandbag
Date: 2012-03-02 22:27:47 UTC
From: briandowner2003
Topic: 493 Message: 501

Hi Geoff,

I managed to get 8 x 3000mAh batteries of eBay for $20, I wonder what they will be like. I will have a look for a charger similar to the one you mention but if nothing comes up I will probably use one of the Microchip Max charge controllers and build one myself, there maybe some room to fit it in the 290

73 de Brian G3ZQI

502. FT-290 R1 Audio stage Oscillating

Yahoo group: electrichandbag
Date: 2012-03-11 06:52:44 UTC
From: briandowner2003
Topic: 502 Message: 502

Hi everyone,

I am in the process of repairing an old R1 that has a problem with the audio stage. On turn on all appears OK, normal noise from the speaker, volume control works ok and the squelch is ok but then it start to whistle like its going off tune and the audio starts to get more gravely untill there is just very heavy spikey audio.

I have monitored the input to the chip with another amplifier when this occurs and all is ok. I suspect the uPc575C2 audio chip is going into self oscillation.

Has anyone had this before?

How do you cure it?

I have changed the chip to no effect

Many thanks

Brian G3ZQI

503. Re: FT-290 R1 Audio stage Oscillating

Yahoo group: electrichandbag
Date: 2012-03-11 11:43:40 UTC
From: dbztuzujdhgtrjzthxh
Topic: 502 Message: 503

Hi Brian,
the most common problem with FTx90's is the electrlytic caps - particualy around the audio amp area. Typicaly they show sign of corosion around the pins (but not always). I've replaced some 22uF that look fine, but measure 5uF when removed.

73
ian

--- In electrichandbag@yahoogroups.com, "briandowner2003" <brian@...> wrote:
>
> Hi everyone,
>
> I am in the process of repairing an old R1 that has a problem with the audio stage. On turn on all appears OK, normal noise from the speaker, volume control works ok and the squelch is ok but then it start to whistle like its going off tune and the audio starts to get more gravely untill there is just very heavy spikey audio.
>
> I have monitored the input to the chip with another amplifier when this occurs and all is ok. I suspect the uPc575C2 audio chip is going into self oscillation.
>
> Has anyone had this before?
>
> How do you cure it?
>
> I have changed the chip to no effect
>
> Many thanks
>
> Brian G3ZQI
>

504. CTCSS Board

Yahoo group: electrichandbag
Date: 2012-03-31 10:28:45 UTC
From: briandowner2003
Topic: 504 Message: 504

Hi,

I was wondering if anyone had a CTCSS board for an R2 and wanted to part with it

Good price paid + P&P

73

Brian G3ZQI

505. ctcss

Yahoo group: electrichandbag
Date: 2012-04-06 16:17:27 UTC
From: PETER B
Topic: 505 Message: 505

Is it possible to use an external ctcss unit, for instance, connected to the ptt line in the mike. I have three Ft 290's and a few Ic 2e clones.
It seems a shame not to be able to use them, via the repeaters.
I am not physically or electronically competant to install one internally.
73. PETER G0HPH

506. Re: [electrichandbag] ctcss

Yahoo group: electrichandbag
Date: 2012-04-07 06:06:20 UTC
From: Mansueto Grech
Topic: 505 Message: 506

Hi Peter,
Yes it is possible to use an external ctcss unit, although it is suggested
to inject the signal after any pre emphases the rig might have.
Check this site.
http://www.spikey-mike.com/radio/ctcss.html
Hope I was of some help
73's and good luck
Mans 9H1GB
On Apr 6, 2012 6:17 PM, "PETER B" <bonnie90@...> wrote:

> **
>
>
> Is it possible to use an external ctcss unit, for instance, connected to
> the ptt line in the mike. I have three Ft 290's and a few Ic 2e clones.
> It seems a shame not to be able to use them, via the repeaters.
> I am not physically or electronically competant to install one internally.
> 73. PETER G0HPH
>
>
>

507. Re: [electrichandbag] ctcss

Yahoo group: electrichandbag
Date: 2012-04-07 14:36:50 UTC
From: PETER BROOKES
Topic: 505 Message: 507

Thanks Mans
I've looked at the site you linked me to, "Spikey Mikey," and it seems OK
I will give it a try. Fingers crossed.
Thanks again.
73,
Peter. G0 HPH

508. Re: [electrichandbag] ctcss

Yahoo group: electrichandbag
Date: 2012-04-07 20:31:32 UTC
From: Mansueto Grech
Topic: 505 Message: 508

Hi Peter,
All noted. If you need any help please do not hesitate to ask.
73's
good luck
Mans. 9H1GB

On 7 April 2012 16:36, PETER BROOKES <bonnie90@btinternet.com> wrote:

> **
>
>
> Thanks Mans
> I've looked at the site you linked me to, "Spikey Mikey," and it seems OK
> I will give it a try. Fingers crossed.
> Thanks again.
> 73,
> Peter. G0 HPH
>
>
>

509. Failure to boot properly

Yahoo group: electrichandbag
Date: 2012-06-27 14:40:54 UTC
From: dbztuzujdhgtrjzthxh
Topic: 509 Message: 509

Hi All,
I recently acquired (another) FT290 Mk1.
Generally it seems in excellent condition with no evidence of any work inside.

The (I suspect) original NiCds had leaked somewhat allowing electrolyte into the contacts of the battery carriers resulting in high resistance (0.5~20 Ohms) between several rivets and the springs. This showed up as erratic behaviour where the cells would show charge, but the set wouldn't run reliably. This was fixed by replacing the two carriers.

The final (for now) problem has been that on occasion, the set would start-up and only provide coverage from 144.000 to 145.975. That might seem ok for some, but here in VK we like a couple more MHz.

I repeatedly followed the reset procedure without any change until I altered one parameter - the display light.

It seems on this set, some of the caps are deteriorating near the CPU and the extra load provided by the lamp is enough to confuse the CPU on boot.

A reset with the lamp off followed by leaving the memory backup turned on seems to have sorted out this "issue".
At some stage I'll replace the electrolytics on the CPU board to make sure, but so far it's running well again.

73
ian

510. Re: [electrichandbag] Failure to boot properly

Yahoo group: electrichandbag
Date: 2012-06-30 16:14:12 UTC
From: Gordon JC Pearce
Topic: 509 Message: 510

On 27/06/12 15:40, dbztuzujdhgtrjzthxh wrote:
> It seems on this set, some of the caps are deteriorating near the CPU
> and the extra load provided by the lamp is enough to confuse the CPU
> on boot.
>
> A reset with the lamp off followed by leaving the memory backup
> turned on seems to have sorted out this "issue". At some stage I'll
> replace the electrolytics on the CPU board to make sure, but so far
> it's running well again.

Any particular reason for suspecting the electrolytics on the CPU board
or is this that mythical "ZOMG ELECTROLYTICS MUST REPLACE THEM" thing
that people do?

If it's working, leave it alone ;-)

--
Gordonjcp MM0YEQ

511. FT290r case

Yahoo group: electrichandbag
Date: 2012-06-30 17:38:40 UTC
From: Mansueto Grech
Topic: 511 Message: 511

Hi all,
A fried donated his old Somerkamp FT290R which works perfectly well but the chassis top and bottom covers are so corroded that you could practically see through it.
Does anyone happen to have an FT290r which is beyond economical repair who might consider parting with.
BTW Somerkamp and Harsh use the same chassis just the front sticker at is different.
Thanks in advance
Mans. 9H1GB

512. Re: FT290r case

Yahoo group: electrichandbag
Date: 2012-06-30 18:17:24 UTC
From: briandowner2003
Topic: 511 Message: 512

There is a top &bottom on EBay in the uk reasonable price

290723371568

Not mine, don't know if they fith the one you have

--- In electrichandbag@yahoogroups.com, Mansueto Grech <mansueto.grech@...> wrote:
>
> Hi all,
> A fried donated his old Somerkamp FT290R which works perfectly well but the
> chassis top and bottom covers are so corroded that you could practically
> see through it.
> Does anyone happen to have an FT290r which is beyond economical repair who
> might consider parting with.
> BTW Somerkamp and Harsh use the same chassis just the front sticker at is
> different.
> Thanks in advance
> Mans. 9H1GB
>

513. Re: [electrichandbag] Failure to boot properly

Yahoo group: electrichandbag
Date: 2012-06-30 19:12:15 UTC
From: Geoff Blake
Topic: 509 Message: 513

On 30 June 2012 17:14, Gordon JC Pearce <gordon@...> wrote:
> On 27/06/12 15:40, dbztuzujdhgtrjzthxh wrote:
>> It seems on this set, some of the caps are deteriorating near the CPU
>> and the extra load provided by the lamp is enough to confuse the CPU
>> on boot.
>>
>> A reset with the lamp off followed by leaving the memory backup
>> turned on seems to have sorted out this "issue". At some stage I'll
>> replace the electrolytics on the CPU board to make sure, but so far
>> it's running well again.
>
> Any particular reason for suspecting the electrolytics on the CPU board
> or is this that mythical "ZOMG ELECTROLYTICS MUST REPLACE THEM" thing
> that people do?
>
> If it's working, leave it alone ;-)
>
> --
> Gordonjcp MM0YEQ
>
Gordon, Group,

From a professional POV, gained from working on and repairing electronic equipment for nearly 50 years now, I can say that after perhaps 20 years of life, most, if not all electronic equipment, perhaps with the exception of some military spec. equipment, some will show benefit from a general replacement sweep of all electrolytic capacitors.

This is not an opinion formed by a few overheard comments, nor am I in the pay of component suppliers! It is a professional opinion formed from the measurable improvement in the performance of calibrated equipment when such measures are taken.

Of course, the quality of components used, hence the comment regarding military kit above. Experienced engineers will recognise "replace on sight" types as well as those of better quality. However there are also "forgeries" in the capacitor world, for example, there has been a type of capacitor, widely used on PC motherboards which has been widely copied, but has quite a short service life - the electrolyte was not quite right. At least two major PC manufacturers fell foul of this one.

Finally, as a closing note, this must be considered in terms of cost. Certainly, employing a professional service to replace all the electrolytics in a FT290 will almost certainly cost more that it is

worth, that is one of the reasons why I now own/use a FT817, but in the case of something which is irreplaceable it is often the only option.

I am minded of a certain piece of measurement equipment, used by coil/transformer manufacturers to measure the inductance and "Q" of high current inductors. These were manufactured in the 1970's and obviously were no longer available - nor was there a functional equivalent available.

I was asked by a client to see if we could refurbish one, almost regardless of cost. We did, mainly by replacing all the electrolytic capacitors, and found that it performed bang on spec., whereas before surgery it was marginal in performance (measurement accuracy) at best. When we returned the instrument to the client, I had a phone call from the engineering director thanking us for our efforts and wishing to schedule the other three of those instruments for refurbishment. In addition we had several others sent in from other companies, companies I never knew existed.

In short then, the "ZOMG ELECTROLYTICS MUST REPLACE THEM" old wives tale may be just that, but like many old wives tales, it is based on more that a modicum of truth.

73 Geoff
--
##
Geoff Blake, G8GNZ JO01fq: Chelmsford, Essex, UK
<geoff@...> or <melecerties@...>
Using Linux: Ubuntu 11.04 on Intel or Debian on UltraSparc
and even on the NAS. Avoiding Micro$oft like the plague.
##

514. Re: [electrichandbag] Failure to boot properly

Yahoo group: electrichandbag
Date: 2012-06-30 21:04:54 UTC
From: Gordon JC Pearce
Topic: 509 Message: 514

On 30/06/12 20:12, Geoff Blake wrote:

> In short then, the "ZOMG ELECTROLYTICS MUST REPLACE THEM" old wives
> tale may be just that, but like many old wives tales, it is based on
> more that a modicum of truth.
>
> 73 Geoff
>

Yup. Where I'm coming from with that is that crappy switched-mode power supplies notwithstanding (those bloody Amstrad SRD1000s!) I've replaced about half a dozen genuinely faulty electrolytics in all the time I've been fiddling about with electronics, and I replace about that many disc ceramics or MLCC surface-mount caps a week.

I've also had to scrap some nice old analogue synths that have been brought to me after someone has decided "oh it's faulty it must be a capacitor" and set about it...

--
Gordonjcp MM0YEQ

515. Re: [electrichandbag] Re: FT290r case

Yahoo group: electrichandbag
Date: 2012-06-30 21:31:52 UTC
From: Mansueto Grech
Topic: 511 Message: 515

Hi Brian,
Thanks for the info.I'll have a look
Thanks again
Mans.9H1GB

On 30 June 2012 20:17, briandowner2003 <brian@...> wrote:

> **
>
>
> There is a top &bottom on EBay in the uk reasonable price
>
> 290723371568
>
> Not mine, don't know if they fith the one you have
>
>
> --- In electrichandbag@yahoogroups.com, Mansueto Grech <mansueto.grech@...>
> wrote:
> >
> > Hi all,
> > A fried donated his old Somerkamp FT290R which works perfectly well but
> the
> > chassis top and bottom covers are so corroded that you could practically
> > see through it.
> > Does anyone happen to have an FT290r which is beyond economical repair
> who
> > might consider parting with.
> > BTW Somerkamp and Harsh use the same chassis just the front sticker at is
> > different.
> > Thanks in advance
> > Mans. 9H1GB
> >
>
>
>

516. Re: [electrichandbag] Failure to boot properly

Yahoo group: electrichandbag
Date: 2012-06-30 21:50:24 UTC
From: Geoff Blake
Topic: 509 Message: 516

On 30 June 2012 22:04, Gordon JC Pearce <gordon@...> wrote:
> On 30/06/12 20:12, Geoff Blake wrote:
>
>> In short then, the "ZOMG ELECTROLYTICS MUST REPLACE THEM" old wives
>> tale may be just that, but like many old wives tales, it is based on
>> more that a modicum of truth.
>>
>> 73 Geoff
>>
>
> Yup. Where I'm coming from with that is that crappy switched-mode power
> supplies notwithstanding (those bloody Amstrad SRD1000s!) I've replaced
> about half a dozen genuinely faulty electrolytics in all the time I've
> been fiddling about with electronics, and I replace about that many disc
> ceramics or MLCC surface-mount caps a week.
>
> I've also had to scrap some nice old analogue synths that have been
> brought to me after someone has decided "oh it's faulty it must be a
> capacitor" and set about it...
>
> --
> Gordonjcp MM0YEQ

Hi Gordon,

I am not quite sure that I understand what you are saying. As I read it, with the exception of SMPSU's, you have only replaced a dozen or so electrolytics. If so, either you have been very lucky, or most of the equipment that you have worked on used (canned) paper capacitors - now those were the days.....

I think that you have to consider the failure modes of various components. Resistors changing value by say 10% manifest themselves in several ways, by shifting operating points of active components etc. whereas a 10% shift in a capacitor is unlikely to be noticed. Similarly, an increase in ESR of a capacitor is not likely to be obvious outside a SMPSU. However, such changes (10% or increased ESR) can make operation marginal, especially if repeated over several components.

Geoff

--
##
Geoff Blake, G8GNZ JO01fq: Chelmsford, Essex, UK
<geoff@palaemon.co.uk> or <melecerties@...>

Using Linux: Ubuntu 11.04 on Intel or Debian on UltraSparc
and even on the NAS. Avoiding Micro$oft like the plague.
##

517. Re: [electrichandbag] Re: FT290r case

Yahoo group: electrichandbag
Date: 2012-07-01 07:00:52 UTC
From: Mansueto Grech
Topic: 511 Message: 517

Hello Again Brian,
Had a look at the item you suggested an yes they are the right ones but I
also need the chassis and back-plate.
Thanks for taking thy time to help me appreciated it very very much
73's
Mans. 9H1G

On 30 June 2012 20:17, briandowner2003 <brian@...> wrote:

> **
>
>
> There is a top &bottom on EBay in the uk reasonable price
>
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> --- In electrichandbag@yahoogroups.com, Mansueto Grech <mansueto.grech@...>
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> > Hi all,
> > A fried donated his old Somerkamp FT290R which works perfectly well but
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> > chassis top and bottom covers are so corroded that you could practically
> > see through it.
> > Does anyone happen to have an FT290r which is beyond economical repair
> who
> > might consider parting with.
> > BTW Somerkamp and Harsh use the same chassis just the front sticker at is
> > different.
> > Thanks in advance
> > Mans. 9H1GB
> >
>
>
>

518. Re: FT290r case

Yahoo group: electrichandbag
Date: 2012-07-01 08:27:17 UTC
From: briandowner2003
Topic: 511 Message: 518

Hi Mans,

I would contact the seller through EBay and see if he has the other parts. If he has the covers he may well have the chassis and backplate, if he has broken up a broken 290

Cheers

Brian

--- In electrichandbag@yahoogroups.com, Mansueto Grech <mansueto.grech@...> wrote:
>
> Hello Again Brian,
> Had a look at the item you suggested an yes they are the right ones but I
> also need the chassis and back-plate.
> Thanks for taking thy time to help me appreciated it very very much
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> On 30 June 2012 20:17, briandowner2003 <brian@...> wrote:
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> > --- In electrichandbag@yahoogroups.com, Mansueto Grech <mansueto.grech@>
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> > > Hi all,
> > > A fried donated his old Somerkamp FT290R which works perfectly well but
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> > > different.
> > > Thanks in advance
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> > >

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>

519. Re: Failure to boot properly

Yahoo group: electrichandbag
Date: 2012-07-01 11:14:46 UTC
From: dbztuzujdhgtrjzthxh
Topic: 509 Message: 519

Hi Gordon,
no, my intention to replace some electrolytics is not based on some "ZOMG".
Nor will it be undertaken on the basis that "If it's working, leave it alone".

Firstly, as stated, it is "not working" and on that basis, a repair is desirable.

Secondly, my personal experience of several FT290s shows that many of the original electrolytics are reaching 'end of life'.
Often corrosion is evident around the legs (caused by leaking electrolyte), but even when not, the capacitance, if measured, can be out by a large margin.
For reasons unknown to me, the caps around the audio amp seem particularly prone to failure. On the last set I worked on, one cap (C137) had one leg corroded through and another (C132 - 47uF) only measured 5uF when tested.

In general I agree with you that there is often little benefit replacing parts wholesale, but there are times where failure of one part will cause the destruction of many (a specific reference to HP141T PSU caps).

Back to the point: if you'd like to suggest an alternative plausible explanation for the symptoms observed, I'd be happy to follow it up.

73
ian

--- In electrichandbag@yahoogroups.com, Gordon JC Pearce <gordon@...> wrote:
>
> On 27/06/12 15:40, dbztuzujdhgtrjzthxh wrote:
> > It seems on this set, some of the caps are deteriorating near the CPU
> > and the extra load provided by the lamp is enough to confuse the CPU
> > on boot.
> >
> > A reset with the lamp off followed by leaving the memory backup
> > turned on seems to have sorted out this "issue". At some stage I'll
> > replace the electrolytics on the CPU board to make sure, but so far
> > it's running well again.
>
> Any particular reason for suspecting the electrolytics on the CPU board
> or is this that mythical "ZOMG ELECTROLYTICS MUST REPLACE THEM" thing
> that people do?
>
> If it's working, leave it alone ;-)
>
> --
> Gordonjcp MM0YEQ
>

520. S-meter staying HI

Yahoo group: electrichandbag
Date: 2012-07-23 21:03:48 UTC
From: paolo passerini
Topic: 520 Message: 520

Hi, I'm Paolo IW2HEU. I joined this group because I need help for a trouble happened to my ft-290r. I reported an issue with the S-meter. When I power on
the radio the S-meter gauge goes on S9 position. After a several
minutes (10 -20 or more) the gauge starts to lower and stop at abt S1 after a lot of time. During
this time I don't have any problem with sensitivity;so I don't think the
ALC line is involved in. I suspect on an elctrolytic but I actually
never start to look for the trouble. I saw there was a similar post (an early day's one) from radiovintage 2000 and g3vvt in 2007.

Does anyone has exeperience of this issue?

Many thanks, 73

excuse me for my english

Paolo, IW2HEU

521. Re: S-meter staying HI

Yahoo group: electrichandbag
Date: 2012-07-25 15:45:01 UTC
From: zaktherabbit
Topic: 520 Message: 521

Hi Paolo,

Look in the files section, there is a simple mod using a 47k resistor across one of the transistors, this much improves the problem.

It seems to be widely considered that the problem comes from the quality of the PCB material. There are many discussions on here about this problem.

One simple way to improve it, is to make use of the radio as much as possible!

Martin G7MRV

--- In electrichandbag@yahoogroups.com, paolo passerini <paolopasse@...> wrote:
>
> Hi, I'm Paolo IW2HEU. I joined this group because I need help for a trouble happened to my ft-290r. I reported an issue with the S-meter. When I power on
> the radio the S-meter gauge goes on S9 position. After a several
> minutes (10 -20 or more) the gauge starts to lower and stop at abt S1 after a lot of time. During
> this time I don't have any problem with sensitivity;so I don't think the
> ALC line is involved in. I suspect on an elctrolytic but I actually
> never start to look for the trouble. I saw there was a similar post (an early day's one) from radiovintage 2000 and g3vvt in 2007.
>
> Does anyone has exeperience of this issue?
>
> Many thanks, 73
>
> excuse me for my english
>
> Paolo, IW2HEU
>

522. Microphone element for YM47 Microphone

Yahoo group: electrichandbag
Date: 2012-07-28 20:50:36 UTC
From: rhpickett
Topic: 522 Message: 522

Hello Everyone,
I recently acquired a FT290r with an intermittent in the microphone. Traced it down to a loose connection at the microphone element itself. One of the tabs glued to the side of the element has come loose. I attempted to reconnect with no success.

Currently looking for a replacement dynamic mic element of the proper size and impedance. I have found one 500 ohm element that will work but I will have to do some major surgery to fit it into the existing case (larger than the original)

Does anyone know of a source for microphone elements?

Thanks!
Rex, K0REX/7

523. New Member With F290R Questions (LCD and mods)

Yahoo group: electrichandbag
Date: 2012-08-12 16:06:54 UTC
From: kb1qzh
Topic: 523 Message: 523

Hi Everyone,
I had bought a FT-290R Mk1 from a weak signal ham a few months ago and I'm just getting to using. I bought it for future use with a transverter. The seller had modified it for a transverter and let me know it had a LCD problem. I have powered it on but no QSO yet, just listening.

The LCD Problem:
The left most digit doesn't turn on unless you press on the screen. How should i go about fixing this?

Upgrades:
What can I do to get more use out of the radio? Add tone support? The Mutek front end? is there a LiPo battery pack that can be used?

Thanks,
Frank b
kb1qzh

524. Re: [electrichandbag] New Member With F290R Questions (LCD and mods)

Yahoo group: electrichandbag
Date: 2012-08-12 16:17:31 UTC
From: Gordon JC Pearce
Topic: 523 Message: 524

On 12/08/12 17:06, kb1qzh wrote:

> The LCD Problem: The left most digit doesn't turn on unless you press
> on the screen. How should i go about fixing this?

The little contacts on the PCB, the rubber strip, or the glass need cleaning. It's a simple job that requires taking the radio apart until it looks like one of those frankly terrifying pictures of a gearbox with a five-spanner rating that you find in Haynes manuals.

Once you've got the panel apart, very carefully cleaning the edge connector on the LCD PCB with some IPA will probably sort it. It's worth swapping the backlight bulb for an LED while you're in there. You don't want to get it apart twice.

> Upgrades: What can I do to get more use out of the radio? Add tone
> support? The Mutek front end? is there a LiPo battery pack that can
> be used?

The Mutek front-end is pretty good. I mostly only use mine on simplex FM or SSB, so the lack of CTCSS isn't really a problem for me.

Since the FT290 runs off about 10kg of HP11 batteries, there's a lot of space for them. If you wanted to run a LiPo you'd need to squeeze in a regulator and charging circuit, but that would still give you masses of space for the battery pack. If you do this, you'll have a battery life measured in days but your FT290 will no longer be suitable for weight training.

--
Gordonjcp MM0YEQ

525. Re: [electrichandbag] New Member With F290R Questions (LCD and mods)

Yahoo group: electrichandbag
Date: 2012-08-13 08:20:06 UTC
From: Mansueto Grech
Topic: 523 Message: 525

Hi Frank,
All you need to do is to carefully remove the display unit and slowly and carefully dismantle it parts. Mainly if memory serves me well, it is made of a main PCB with to strips of conducting rubber and the actual display. Just clean the conducting rubber and the LCD display and reassemble.
That should do the job for you.

MAY I SUGGEST to take some pic whilst disassembling to aid you during the reverse process.
Take care and good luck.

On 12 August 2012 18:06, kb1qzh <art.ballentine@...> wrote:

> **
>
>
> Hi Everyone,
> I had bought a FT-290R Mk1 from a weak signal ham a few months ago and I'm
> just getting to using. I bought it for future use with a transverter. The
> seller had modified it for a transverter and let me know it had a LCD
> problem. I have powered it on but no QSO yet, just listening.
>
> The LCD Problem:
> The left most digit doesn't turn on unless you press on the screen. How
> should i go about fixing this?
>
> Upgrades:
> What can I do to get more use out of the radio? Add tone support? The
> Mutek front end? is there a LiPo battery pack that can be used?
>
> Thanks,
> Frank b
> kb1qzh
>
>
>

526. Re: New Member With F290R Questions (LCD and mods)

Yahoo group: electrichandbag
Date: 2012-08-13 10:51:27 UTC
From: g3vvt
Topic: 523 Message: 526

Hi Frank,

There a few articles by Ian G0JRE and others in mods.dk for the Yaesu FT-290R regarding the replacement of the lamp. I you follow these at least one of them mentions the problem with the LCD digits and how to cure the problem you have. The important thing it does give a step by step method of accessing the LCD as well as the lamp. Took the time to download these from the mods.dk site and have them in my FT-290R notes file for future.

Regards,
Bob, G3VVT

527. Re: New Member With F290R Questions (LCD and mods)

Yahoo group: electrichandbag
Date: 2012-08-13 15:44:09 UTC
From: kb1qzh
Topic: 523 Message: 527

Thanks everyone!!
Question on lamp replacement (might as well do the LED conversion, right?) Is the LED something special or can I use from the local electronics store?

73
Frank
kb1qzh

--- In electrichandbag@...m, "g3vvt" <g3vvt@...> wrote:
>
>
>
> Hi Frank,
>
> There a few articles by Ian G0JRE and others in mods.dk for the Yaesu FT-290R regarding the replacement of the lamp. I you follow these at least one of them mentions the problem with the LCD digits and how to cure the problem you have. The important thing it does give a step by step method of accessing the LCD as well as the lamp. Took the time to download these from the mods.dk site and have them in my FT-290R notes file for future.
>
>
> Regards,
> Bob, G3VVT
>

528. Re: Failure to boot properly

Yahoo group: electrichandbag
Date: 2012-08-15 11:37:24 UTC
From: dbztuzujdhgtrjzthxh
Topic: 509 Message: 528

Hi all,
to continue the story, I pulled the `290 apart to give access to the CPU board today.

There are only two electrolytics on that PCB, so I replaced them both (both 10uf 16V). As they are only about 4mm diam, I replaced them with tants.

Interestingly one looked fine while the other showed more than its share of leakage.

Naturally you can't see any sign of leakage until the cap has been removed!

http://groups.yahoo.com/group/electrichandbag/photos/album/884029765/pic/956380291/view

529. RX Mute

Yahoo group: electrichandbag
Date: 2012-08-27 01:06:19 UTC
From: Gary VK2KYP
Topic: 529 Message: 529

Hi All, I brought a second hand FT290 Mk1 one of its problems is when you go to transmit your voice appears out of the speaker. There seems to be a problem with the muting of the Rx when I am transmitting.

Has anyone else experienced this and how did you solve this problem?

Thank you

73 Gary VK2KYP

530. Re: RX Mute

Yahoo group: electrichandbag
Date: 2012-08-29 20:27:54 UTC
From: Gary VK2KYP
Topic: 529 Message: 530

Good Moring from VK.

I have solved a few problems in my FT-290R

1) A previous owner must have had trouble with the audio output stage as this has been replaced by a LM388 amplifier mounted on a piece of veroboard. This amplifier was getting RF into it and 1000pF capacitor across its input solved the audio rectification problem.
2) The common ALC/AGC problem was solved with a 47k resistor across the base emitter junction of Q1014.

I am now chasing the lack of CW side tone. The side tone is being generated but is not finding its way to the LM386 audio amp.

I am looking for a copper side overlay of the PCB to help me trace the side tone routing.

Thank you

73 Gary vk2kyp

--- In electrichandbag@yahoogroups.com, "Gary VK2KYP" <vk2kyp@...> wrote:
>
> Hi All, I brought a second hand FT290 Mk1 one of its problems is when you go to transmit your voice appears out of the speaker. There seems to be a problem with the muting of the Rx when I am transmitting.
>
> Has anyone else experienced this and how did you solve this problem?
>
> Thank you
>
> 73 Gary VK2KYP
>

531. Re: Newbie with display/freq problems. 290 mk1

Yahoo group: electrichandbag
Date: 2012-08-29 09:17:25 UTC
From: dbztuzujdhgtrjzthxh
Topic: 447 Message: 531

Hi Pete,
did you ever sort out this problem?

I've recently acquired an FT290r and although to appears to be in very good shape, like yours, it's 25kHz off freq.

To be exactly one channel off seems to be more than a simple coincidence to me.

Like yours, mine Tx and Rx on the same freq. which is 25kHz below what is displayed.

73
ian

--- In electrichandbag@...m, "g7vhj" <g7vhj@...> wrote:
>
>
>
> --- In electrichandbag@yahoogroups.com, Gordon JC Pearce <gordon@> wrote:
> >
> > On Sun, 04 Dec 2011 22:17:55 -0000
> > "g7vhj" <g7vhj@> wrote:
> >
> > > Hi All,
> > > Thanks for the fantastic group i have gleaned much information already.
> > > I hope someone can help with a problem i have with a mk1 290.
> > > The display is off frequency with the radio, I.E if i want to put out a call on 145:500 the i need the radio to display 145:525 to be on the right frequency.
> > > The radio display is 25KHz off on all modes and whatever frequncy i try.
> > > The Manual suggests that it is the 18MHz x-tal at fault but after changing this i am convinced there is something i am missing.
> > > Is there a variable cap/res that allows the display to be altered to the same freq as the pll?
> > > Many thanks Pete de G7VHJ
> >
> > Have you gone through the alignment procedure? I'd take a look at the VCO and ref oscillator sections of that.
> >
> > The display shows you what the PLL is programmed for. If the reference oscillator or any of the local oscillators are out, the transmit and receive frequencies will be out.
> >
> > --
> > Gordon JC Pearce MM0YEQ <gordonjcp@>
> >
>
> Thanks for the Advice Gordon,
> I must admit i haven't gone through the alignment yet as i was hoping that the fault

might have been easier than that,
> O.K i guess its time to fire up the sig gen and scope and start probing the board.
> regards Pete de G7VHJ
>

532. RE: [electrichandbag] Re: Newbie with display/freq problems. 290 mk1

Yahoo group: electrichandbag
Date: 2012-08-31 05:31:28 UTC
From: Pete Gow
Topic: 447 Message: 532

Hi Ian.Yes it was sorted and it was the VCO that was off, very small adjustments were madeuntil it came into line and then it was out with the scope and sig gen to get the final alignment.73 Pete de G7VHJ

To: electrichandbag@yahoogroups.com
From: dbztuzujdhgtrjzthxh@...
Date: Wed, 29 Aug 2012 09:17:25 +0000
Subject : [electrichandbag] Re: Newbie with display/freq problems. 290 mk1

Hi Pete,

did you ever sort out this problem?

I've recently acquired an FT290r and although to appears to be in very good shape, like yours, it's 25kHz off freq.

To be exactly one channel off seems to be more than a simple coincidence to me.

Like yours, mine Tx and Rx on the same freq. which is 25kHz below what is displayed.

73

ian

--- In electrichandbag@yahoogroups.com, "g7vhj" <g7vhj@...> wrote:

>

>

>

> --- In electrichandbag@yahoogroups.com, Gordon JC Pearce <gordon@> wrote:

> >

> > On Sun, 04 Dec 2011 22:17:55 -0000

> > "g7vhj" <g7vhj@> wrote:

> >

> > > Hi All,

> > > Thanks for the fantastic group i have gleaned much information already.

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> > > The display is off frequency with the radio, I.E if i want to put out a call on 145:500 the i need the radio to display 145:525 to be on the right frequency.

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> > --

> > Gordon JC Pearce MM0YEQ <gordonjcp@>

> >

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> regards Pete de G7VHJ

>

533. Re: Newbie with display/freq problems. 290 mk1

Yahoo group: electrichandbag
Date: 2012-08-31 12:50:50 UTC
From: dbztuzujdhgtrjzthxh
Topic: 447 Message: 533

Cheers Pet, thanks for the reply.
Rather disturbingly, mine my set has returned to a more common 1.5kHz error (as measured on an uncalibrated, std.XO HP5315A).
Nothing has been adjusted in the meantime, however I did replace the cap soldered to T2005.
Not sure if the cap had an effect, heat from soldering or something completely unrelated.
Not exactly a satisfactory solution, but I guess it will have to do for now.

73
ian

--- In electrichandbag@yahoogroups.com, Pete Gow <g7vhj@...> wrote:
>
>
> Hi Ian.Yes it was sorted and it was the VCO that was off, very small adjustments were madeuntil it came into line and then it was out with the scope and sig gen to get the final alignment.73 Pete de G7VHJ
>
> To: electrichandbag@yahoogroups.com
> From: dbztuzujdhgtrjzthxh@...
> Date: Wed, 29 Aug 2012 09:17:25 +0000
> Subject : [electrichandbag] Re: Newbie with display/freq problems. 290 mk1
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>
>
> To be exactly one channel off seems to be more than a simple coincidence to me.
>
>
>
> Like yours, mine Tx and Rx on the same freq. which is 25kHz below what is displayed.
>
>
>
> 73
>
> ian
>
>
>
> --- In electrichandbag@yahoogroups.com, "g7vhj" <g7vhj@> wrote:
>
> >
>
> >
>
> >
>
> > --- In electrichandbag@yahoogroups.com, Gordon JC Pearce <gordon@> wrote:
>
> > >
>
> > > On Sun, 04 Dec 2011 22:17:55 -0000
>
> > > "g7vhj" <g7vhj@> wrote:
>
> > >
>
> > > > Hi All,
>
> > > > Thanks for the fantastic group i have gleaned much information already.
>
> > > > I hope someone can help with a problem i have with a mk1 290.

>
> > > > The display is off frequency with the radio, I.E if i want to put out a call on 145:500 the i need the radio to display 145:525 to be on the right frequency.
>
> > > > The radio display is 25KHz off on all modes and whatever frequncy i try.
>
> > > > The Manual suggests that it is the 18MHz x-tal at fault but after changing this i am convinced there is something i am missing.
>
> > > > Is there a variable cap/res that allows the display to be altered to the same freq as the pll?
>
> > > > Many thanks Pete de G7VHJ
>
> > >
>
> > > Have you gone through the alignment procedure? I'd take a look at the VCO and ref oscillator sections of that.
>
> > >
>
> > > The display shows you what the PLL is programmed for. If the reference oscillator or any of the local oscillators are out, the transmit and receive frequencies will be out.
>
> > >
>
> > > --
>
> > > Gordon JC Pearce MM0YEQ <gordonjcp@>
>
> > >
>
> >
>
> > Thanks for the Advice Gordon,
>
> > I must admit i haven't gone through the alignment yet as i was hoping that the fault might have been easier than that,
>
> > O.K i guess its time to fire up the sig gen and scope and start probing the board.
>
> > regards Pete de G7VHJ
>
> >
>

534. Plastic hold down for LCD display

Yahoo group: electrichandbag
Date: 2012-09-12 14:14:30 UTC
From: kate9966
Topic: 534 Message: 534

Hi all,
I have a question, I have a unit where the little plastic frame that holds the LCD down firmly against the elastomer strips has a broken tab.
The result is that you can't see the display unless you gently press on it with a finger, or eraser or some such.
I actually tried to screw it down by drilling a tiny hole and putting an 80-00 screw and nut through it, but that didn't work.
I'm guessing that just replacing the plastic frame would take care of the problem.
Another problem I've considered is, do those elastomer strips ever get old??? I've cleaned them a couple of times with IPA and a q-tip, and given that pressing on the display makes it work I'm thinking that it is just the frame.

Any thoughts? Anyone know where I might get a working plastic frame? or have any other ideas on fixing this?

Other than this, the radio works fine, well, except for the backlight, and memory battery, and possibly a minor alignment.

Thanks for your thougths,

Mike
KB0ozn

535. My Electric Handbag

Yahoo group: electrichandbag
Date: 2012-10-31 07:57:04 UTC
From: Michele
Topic: 535 Message: 535

Hello everybody,
since the group has been silent for a while, let me waste some bandwidth by telling the story of my FT290R (first series). This was the first all-more VHF radio I had when I was "young", and had a lot of fun with it, hiking mountains to get the longest hops, etc.

Then in the early 2000s I sold it to get money to buy the "brand new" FT817.. after few years, guess what ? Yes, I missed it... so this autumn I started a search to get one, and eventually found one for a reasonable price. Cosmetically kind of ok, it had the usual electrical "quirks" due to age: FM starting to work after few seconds being turned on, S-meter sometimes sloooowly going back to "0", etc.

So I decided to take the "brute-force" approach and I changed ALL the electrolytic capacitors; I took it as a hobby (what it actually is) and replaced maybe 2 or 3 caps a day (and not every day), taking it slowly, relaxing and enjoying doing it... It took me 10 euros of components and 3 weeks of time, but eventually more than 40 caps were replaced. I also did an alignment, that was somehow needed after caps replacement (expecially carrier balance in SSB mode). Now (knocking of wood) it seems to work flawlessly... I bought new C-size 4000 mAh NiMh batteries, whose charge will possibly last forever... now I am ready to have some fun again with the "new old" FT290R.
73,

Michele IZ2EAS

536. Addenda...

Yahoo group: electrichandbag
Date: 2012-10-31 08:38:34 UTC
From: Michele
Topic: 536 Message: 536

In my previous mail I forgot to ask... The memory knob of my FT290R is cracked; I glued it and it works fine, but I really would like to replace it with a good one; does anybody have an extra memory/band knob that doed not use, and want to part from it? (BTW, I am in Italy...)
73,

Michele IZ2EAS

537. Re: [electrichandbag] My Electric Handbag

Yahoo group: electrichandbag
Date: 2012-10-31 11:06:22 UTC
From: Geoff Blake
Topic: 535 Message: 537

Hi Michele, group,

As a long term advocate of block replacement of electrolytics, well done and I hope that your FT290R is back to 99% operation. Have you had the opportunity to carry out any measurements of the sensitivity, frequency accuracy etc.

As a (now retired) test equipment engineer I can confirm that much equipment of perhaps 20+ years of age show a noticeable deterioration in performance due to ageing electrolytic capacitors, however this is dependent on the manufacture of the capacitors, as they say, "you get what you pay for" and generally the domestic market (I include much amateur equipment here) is built down to a price rather than up to a quality standard.

73 Geoff, G8GNZ

On 31 October 2012 07:57, Michele <damico@...limi.it> wrote:
>
> Hello everybody,
> since the group has been silent for a while, let me waste some bandwidth by telling the story of my FT290R (first series). This was the first all-more VHF radio I had when I was "young", and had a lot of fun with it, hiking mountains to get the longest hops, etc.
>
> Then in the early 2000s I sold it to get money to buy the "brand new" FT817.. after few years, guess what ? Yes, I missed it... so this autumn I started a search to get one, and eventually found one for a reasonable price. Cosmetically kind of ok, it had the usual electrical "quirks" due to age: FM starting to work after few seconds being turned on, S-meter sometimes slooooowly going back to "0", etc.
>
> So I decided to take the "brute-force" approach and I changed ALL the electrolytic capacitors; I took it as a hobby (what it actually is) and replaced maybe 2 or 3 caps a day (and not every day), taking it slowly, relaxing and enjoying doing it... It took me 10 euros of components and 3 weeks of time, but eventually more than 40 caps were replaced. I also did an alignment, that was somehow needed after caps replacement (expecially carrier balance in SSB mode). Now (knocking of wood) it seems to work flawlessly... I bought new C-size 4000 mAh NiMh batteries, whose charge will possibly last forever... now I am ready to have some fun again with the "new old" FT290R.
> 73,
>
> Michele IZ2EAS
>
>
>
>
>

> ------------------------------------
>
> Yahoo! Groups Links
>
>
>

--
##
Geoff Blake, G8GNZ JO01fq: Chelmsford, Essex, UK
<geoff@...> or <melecerties@gmail.com>
Using Linux: Ubuntu 11.04 on Intel or Debian on UltraSparc
and Apple OS X 10.8.2 Mountain Lion on my Macbook Pro.
Avoiding Micro$oft like the plague.
##

538. Re: Addenda...

Yahoo group: electrichandbag
Date: 2012-10-31 12:11:18 UTC
From: John S
Topic: 536 Message: 538

Hi Michele, try this eBay link for FT-290 parts
http://stores.ebay.co.uk/partsdx?_trksid=p2047675.l2563

73 John G6BHB

539. Re: Addenda...

Yahoo group: electrichandbag
Date: 2012-10-31 16:33:41 UTC
From: Michele
Topic: 536 Message: 539

Hi John,
thanks for the link, I do know the seller.. actually, he is selling the whole set of knobs, kind of an overkill in my case... I just need one!
73,

Michele IZ2EAS

--- In electrichandbag@yahoogroups.com, John S <john.g6bhb@...> wrote:
>
> Hi Michele, try this eBay link for FT-290 parts
> http://stores.ebay.co.uk/partsdx?_trksid=p2047675.l2563
>
> 73 John G6BHB
>

540. Re: My Electric Handbag

Yahoo group: electrichandbag
Date: 2012-10-31 16:41:04 UTC
From: Michele
Topic: 535 Message: 540

Hi Geoff, group,
yes, I too found more effective to change them all... the cost of the components is very low, the originals are 30 years old anyway, and since I was there and the radio was opened on the bench...

Now it seems to be working 100% (fingers crossed...); I re-aligned the PLL LO (slightly out of frequency), and re-balanced the SSB carrier. Everything else seems to be in spec, including sensitivity (I did a quick-and-dirty test using a modern receiver).

It will be fun to use it....

73, Michele IZ2EAS

--- In electrichandbag@yahoogroups.com, Geoff Blake <geoff@...> wrote:
>
> Hi Michele, group,
>
> As a long term advocate of block replacement of electrolytics, well
> done and I hope that your FT290R is back to 99% operation. Have you
> had the opportunity to carry out any measurements of the sensitivity,
> frequency accuracy etc.
>
> As a (now retired) test equipment engineer I can confirm that much
> equipment of perhaps 20+ years of age show a noticeable deterioration
> in performance due to ageing electrolytic capacitors, however this is
> dependent on the manufacture of the capacitors, as they say, "you get
> what you pay for" and generally the domestic market (I include much
> amateur equipment here) is built down to a price rather than up to a
> quality standard.
>
> 73 Geoff, G8GNZ
>
>

541. Re: [electrichandbag] Re: My Electric Handbag

Yahoo group: electrichandbag
Date: 2012-10-31 18:38:37 UTC
From: Geoff Blake
Topic: 535 Message: 541

Hi Michele, group,

I am very pleased to hear the results are so good and perhaps it will encourage other FT290 and similar model owners to resurrect their equipment at low cost.

73 Geoff G8GNZ

On 31 October 2012 16:41, Michele <damico@...> wrote:
>
> Hi Geoff, group,
> yes, I too found more effective to change them all... the cost of the components is very low, the originals are 30 years old anyway, and since I was there and the radio was opened on the bench...
>
> Now it seems to be working 100% (fingers crossed...); I re-aligned the PLL LO (slightly out of frequency), and re-balanced the SSB carrier. Everything else seems to be in spec, including sensitivity (I did a quick-and-dirty test using a modern receiver).
>
> It will be fun to use it....
>
> 73, Michele IZ2EAS
>
> --- In electrichandbag@yahoogroups.com, Geoff Blake <geoff@...> wrote:
>>
>> Hi Michele, group,
>>
>> As a long term advocate of block replacement of electrolytics, well
>> done and I hope that your FT290R is back to 99% operation. Have you
>> had the opportunity to carry out any measurements of the sensitivity,
>> frequency accuracy etc.
>>
>> As a (now retired) test equipment engineer I can confirm that much
>> equipment of perhaps 20+ years of age show a noticeable deterioration
>> in performance due to ageing electrolytic capacitors, however this is
>> dependent on the manufacture of the capacitors, as they say, "you get
>> what you pay for" and generally the domestic market (I include much
>> amateur equipment here) is built down to a price rather than up to a
>> quality standard.
>>
>> 73 Geoff, G8GNZ
>>
>>
>
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>

> ------------------------------------
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> Yahoo! Groups Links
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##
Geoff Blake, G8GNZ JO01fq: Chelmsford, Essex, UK
<geoff@...> or <melecerties@...>
Using Linux: Ubuntu 11.04 on Intel or Debian on UltraSparc
and Apple OS X 10.8.2 Mountain Lion on my Macbook Pro.
Avoiding Micro$oft like the plague.
##

542. Fading display: cleaning LCD contacts?

Yahoo group: electrichandbag
Date: 2012-11-05 10:55:35 UTC
From: Geert Jan de Groot
Topic: 542 Message: 542

Greetings all,

I'm working on an FT-290 fixer-upper where, among other (now-fixed) problems,
the segments of the LCD are fading. All segments are working,
just poor contrast (grey instead of dark black).

I note that the VSS voltage of the LCD module is not connected to ground,
but connected to a setup involving a NTC, supposedly to make the
contrast temperature-independent. I tried varying the voltage a bit but
did not see a clear difference in contrast.
Since the LCD module doesn't have a `ground` connection (VSS floats
at about +2V), where does the module get it's 0V from?

One of the comments in the files is to "disassemble the LCD module and
clean the rubber contact strip". Has anyone tried that recently,
good or bad, as I'm worried that taking apart a 30-year old plastic
construction will make matters worse. Recent experiences appreciated.

Also can't find specs of the Texas Instruments TP0401 driver chip anywhere.

Oh, when I started working on the unit, it didn't work at all: turns out
the soldering of the big voltage regulator transistor on the regulator board
(the pertinax board with the backup battary on it) had cracked.
Symptoms were that the battary meter worked, but nothing else,
and the unit only pulled 10mA instead of the usual 60-70mA idle current.
Soldering the ping through fixed the problem, hopefully for another 30 years.

73,

Geert Jan PE1HZG

543. Re: Fading display: cleaning LCD contacts?

Yahoo group: electrichandbag
Date: 2012-11-05 11:58:43 UTC
From: brian.flynn@tiscali.co.uk
Topic: 542 Message: 543

I just disassembled the display of one about 4 weeks ago and cleaned the contacts. There was not signs of the contact rubber degrading on that specimen. I used a cotton bud and some IPA to do the cleaning. My unit had some stuck segments which stay on all the time and that did not respond to cleaning. The display did get darker after the clean so I suppose that was a plus. I use the radio as a microwave IF. I have a couple and they work well for that.

73s
Brian GM8BJF.
--
Dr Brian W Flynn
15 Riselaw Crescent
Edinburgh
EH10 6HN

0131 447 4043

544. 12V at the antenna socket?

Yahoo group: electrichandbag
Date: 2012-12-20 09:36:56 UTC
From: m6poa
Topic: 544 Message: 544

Hi there all,

My FT-290 Mk1 isn't giving 12V at the antenna socket when transmitting which means I can't get it to drive my transverter.

I've been told it may be a common problem, but can't find any info anywhere.

Does anyone got any ideas where the problem may lie?

Thanks in advance,

Jon

545. Re: 12V at the antenna socket?

Yahoo group: electrichandbag
Date: 2012-12-20 13:24:28 UTC
From: gi0gdp
Topic: 544 Message: 545

--- In electrichandbag@yahoogroups.com, "m6poa" <jnthnlambert@...> wrote:
>
> Hi there all,
>
> My FT-290 Mk1 isn't giving 12V at the antenna socket when transmitting which means I can't get it to drive my transverter.
>
> I've been told it may be a common problem, but can't find any info anywhere.
>
> Does anyone got any ideas where the problem may lie?
>
> Thanks in advance,
>
> Jon
>

Mine was solved by removing the in built aerial, but it also had a Mutek pre-amp fitted and i can't remember if that was related to it
Geoff

546. Re: 12V at the antenna socket?

Yahoo group: electrichandbag
Date: 2012-12-20 16:22:38 UTC
From: GM8BJF
Topic: 544 Message: 546

In their unmodified state these radios put a dc voltage out of the antenna socket when on transmit. The idea behind this was to operate external accessories such as PAs and tranverters. I use it to operate the switching on my microwave transverters. It can be blocked off with a small ceramic cap if not wanted.

73s

Brian,

GM8BJF.

--- In electrichandbag@yahoogroups.com, "gi0gdp" <gi0gdp@...> wrote:
>
>
>
> --- In electrichandbag@yahoogroups.com, "m6poa" <jnthnlambert@> wrote:
> >
> > Hi there all,
> >
> > My FT-290 Mk1 isn't giving 12V at the antenna socket when transmitting which means I can't get it to drive my transverter.
> >
> > I've been told it may be a common problem, but can't find any info anywhere.
> >
> > Does anyone got any ideas where the problem may lie?
> >
> > Thanks in advance,
> >
> > Jon
> >
>
> Mine was solved by removing the in built aerial, but it also had a Mutek pre-amp fitted and i can't remember if that was related to it
> Geoff
>

547. Re: 12V at the antenna socket?

Yahoo group: electrichandbag
Date: 2013-01-02 12:07:02 UTC
From: m6poa
Topic: 544 Message: 547

Thanks for the replies, sorry for the delay, festive season and all that.

I finally managed to get time to try the 290 without the antenna screwed in; no joy firing the transverter.

I'm wondering if the output DC is supposed to be 12V though. Would 6.8V be feasible? There is an output, but it's nearer 10 than 12V.

Thanks again,

Jon

--- In electrichandbag@yahoogroups.com, "GM8BJF" <brian.flynn@...> wrote:
>
>
> In their unmodified state these radios put a dc voltage out of the antenna socket when on transmit. The idea behind this was to operate external accessories such as PAs and tranverters. I use it to operate the switching on my microwave transverters. It can be blocked off with a small ceramic cap if not wanted.
>
> 73s
>
> Brian,
>
> GM8BJF.
>
> --- In electrichandbag@yahoogroups.com, "gi0gdp" <gi0gdp@> wrote:
> >
> >
> >
> > --- In electrichandbag@yahoogroups.com, "m6poa" <jnthnlambert@> wrote:
> > >
> > > Hi there all,
> > >
> > > My FT-290 Mk1 isn't giving 12V at the antenna socket when transmitting which means I can't get it to drive my transverter.
> > >
> > > I've been told it may be a common problem, but can't find any info anywhere.
> > >
> > > Does anyone got any ideas where the problem may lie?
> > >
> > > Thanks in advance,
> > >
> > > Jon
> > >
> >

> > Mine was solved by removing the in built aerial, but it also had a Mutek pre-amp fitted and i can't remember if that was related to it
> > Geoff
> >
>

548. Finer FM frequency steps for the FT-790RII

Yahoo group: electrichandbag
Date: 2013-01-06 00:57:36 UTC
From: Wayne
Topic: 548 Message: 548

All

G'day, new to this group after recently obtaining a FT-790RII.

Just getting use to operating a new radio, I found that the STEPS on FM were too clunky (large) with the standard being 12.5, 25 and 50KHz.

I would like to have finer frequency steps.

I looked on the internet for any suggestions. NIL

However after locating the circuit diagrams, thanks to IW2HEU

http://www.radiomanual.info/YAESU_UHF.html

I had a closer look at the CPU unit circuit.

I noticed a link that was marked on the circuit as:

OPEN: 5KHz Steps
CLOSED: 12.5KHz Steps

This is connected to the P2502 connector (Pin 3).

So I tried locating this.

To cut a long story short, here are the steps to do this. After trying to get access to the CPU board, I latter found an easier way. This is described here.

NOTE: I take no responsibility for your radio if you attempt to perform this mod. It is just a fact sharing exercise.

(1) Remove DC power to the unit.

(2) Remove all the knobs from the front panel and their associated nuts etc. Place them in a safe place, and in some order for easier reassembly.

(3) Remove the microphone socket nut as well. Do not remove the BNC retaining nut (learnt the hard way). It's a difficult job putting it back on.

(4) Remove the top and bottom covers. Also the side cheeks.

(5) Remove the coax connector toward the rear of the top PCB. This is the other end of the cable that goes to the front BNC connector.

(6) Carefully unstick the copper tape that is stuck on to the front panel. This is near the screw holes from the front of the top and bottom covers.

(7) Remove the front panel. There are interconnecting wires between the CPU and SWITCH Unit PCB's. Notice that Yaesu use the Resistor colour code for wiring up the connectors (Brown =

pin 1, Orange = pin 3 etc)

(8) Desolder the cable that is going to the STEP switch. In my unit it is the ORANGE wire, that is connected to PIN 3 of P2502 connector on the CPU PCB. Cover the end of this cable so that it does not short with anything. Note: this is not the orange wire that is connected to the CPU PCB with no connector (hard wired to the PCB)

(9) Reassemble in the reverse order.

My radio now tunes in the following steps for the FM Mode: 5, 10 and 20KHz. SSB/CW STEPS were unaffected.

Hope this may be of assistance.

Regards

Wayne
VK5APN
PF95jg
http://people.aapt.net.au/~pearsons

549. Re: FT-790RII overmodulation on transmit

Yahoo group: electrichandbag
Date: 2013-01-15 04:50:07 UTC
From: kf7bsf
Topic: 238 Message: 549

I know I posted this a while back, but I wanted to update the group on my findings.

As it turns out, the radio is fine. The detachable power amp is bad causing the distortion. I ve verified this on the air with the help of some friends.

Does anyone have one of these amps or any information on repairing them?

73 de KF7BSF
Gene

--- In electrichandbag@yahoogroups.com, "kf7bsf" wrote:
>
> I finally located a 790 mk2 and performed my preliminary tests on it tonight. The rx is good, but on transmit the signal reports indicated a lot of distortion. By speaking offside the mic at an arms length away the reports were greatly improved.
>
> I was transmitting w/the battery pack, fresh batteries, and an external dual band vertical antenna.
>
> I tested 3 different mics, all yeasu (MH-15D8, MH-15C8, and YM-47) with similar results. One of these mics (the MH-15C8) is used daily on my FT-290RII with good reports and my normal mic position is 3~4 inches from my mouth. My suspicion is that the internal mic preamp gain is too high.
>
> 1) Does anyone have or know the location of a service manual for the 290/690/790 Mk2s?
> 2) Is anyone aware of the procedure for adjusting the mic gain on these radios? I assume this is an internal adjustment if it exists at all.
> 3) Are there any common component failures related to the problem I describe?
>
> Otherwise this is a very clean unit and came with the 25w amp, a battery pack, and the Mh-15D8
>
> Any feed back would be greatly appreciated.
>
> Gene/KF7BSF
>

550. Re: FT-790RII overmodulation on transmit

Yahoo group: electrichandbag
Date: 2013-01-15 12:59:49 UTC
From: g3vvt@aol.com
Topic: 238 Message: 550

Hi Gene,

Sounds more like a classic case of over deviation. I have some notes passed verbally for the FT-290RII and have the schematics which are possibly from Mods.DK.

The notes I have say: Deviation control is VR05 which is located 2" from the back on the speaker side and 2" from the RHS next to a PLG/SKT viewed from the top of the radio.

Normal setting would be for a peak deviation of +/- 4.5kHz, though with the increased use of narrow deviation here I now use a compromise figure of +/-3.0kHz speech + 250Hz CTCSS which comes out at +/- 3.25kHz total peak deviation. This fits in with older amateur radios and yet is still able to pass through the IF filters of modern LMR repeaters as long as channel frequency settings are accurate. I also noted that the deviation control in the FT-290RII works in the normal sense. Clockwise = increase, anti-clock = decrease. Hopefully the FT-790RII is similar.

Regards,
Bob, G3VVT

551. FT-290 Narrow band deviation for UK Repeaters

Yahoo group: electrichandbag
Date: 2013-02-17 19:04:22 UTC
From: yorkscouts
Topic: 551 Message: 551

I have an FT-290 that I have installed a CTCSS module in and I now need to setup the FT-290 to narrow band FM deviation for use on UK repeaters.

I have a friend of a friend who is in the trade and has access to the set up equipment. What specification do I need to give him for the FM deviation and the CTCSS deviation???
Thanks
Dean G7PFN

552. Re: [electrichandbag] FT-290 Narrow band deviation for UK Repeaters

Yahoo group: electrichandbag
Date: 2013-02-17 20:10:55 UTC
From: Geoff Blake
Topic: 551 Message: 552

FM deviation: 2.5kHz max, ideally 2.4kHz, CTCSS tones: 500Hz max,
ideally 400Hz. These IIRC are the specs for PMR 12.5kHz channelling
and should be used on 2m and 70cm.

Geoff G8GNZ

On 17 February 2013 19:04, yorkscouts <dean.rayner@...> wrote:
> I have an FT-290 that I have installed a CTCSS module in and I now need to setup the
FT-290 to narrow band FM deviation for use on UK repeaters.
>
> I have a friend of a friend who is in the trade and has access to the set up equipment.
What specification do I need to give him for the FM deviation and the CTCSS deviation???
> Thanks
> Dean G7PFN
>
>
>
> ------------------------------------
>
> Yahoo! Groups Links
>
>
>

--
##
Geoff Blake, G8GNZ JO01fq: Chelmsford, Essex, UK
<geoff@...> or <melecerties@...>
Using Linux: Ubuntu 11.04 on Intel or Debian on UltraSparc
and Apple OS X 10.8.2 Mountain Lion on my Macbook Pro.
Avoiding Micro$oft like the plague.
##

553. Re: FT-290 Narrow band deviation for UK Repeaters

Yahoo group: electrichandbag
Date: 2013-02-18 14:05:15 UTC
From: g3vvt@...
Topic: 551 Message: 553

Hi Dean,

The PMR figure is normally an absolute maximum of +/-2.5kHz, though have seen figures quoted from +/-2.2kHz to 2.5kHz. The CTCSS deviation however should be about +/-250Hz for 12.5kHz channel usage as the +/-500Hz figure is normally for 25kHz channel use only. In the repeaters I maintain with a repeater control logic system which uses the CML FX365C CTCSS chip, this will detect a valid decode at +/-100Hz deviation whatever the channel spacing. Other logic systems can be better or worse from this figure. Running the CTCSS too high can result in complaints of an apparent buzz on the audio particularly on older radios that do not filter out the audio spectrum below 300Hz.

A spanner in the works for all this and a point missed by many is that the deviation of a TX is additive.
In other words +/-2.25kHz speech + +/-250Hz CTCSS will give you a total deviation of +/-2.5kHz which is the normal PMR limit for a 12.5kHz channel.

As there is a need the FT-290R and other similar older radios to work in simplex mode with possibly 25kHz channel specification radios, a compromise has to be made.
As the usage is for amateur use only and with a radio such as this that has only one deviation setting available have adopted a compromise deviation setting of +/-3kHz for the speech and +/-250Hz CTCSS. For this to be acceptable the radio must be accurately on channel, a point which some FT-290R fall down on, though can be adjusted with care to be correct. The reason this can work is that the IF filters fitted to PMR radios with 12.5kHz channel spacing give a bandwidth of +/-3.75kHz (7.5kHz total BW) and the figure I use will just fit with a little spare. Running with deviation too high or with the TX (or the RX at the other end) not on frequency can result in the squelch closing momentarily when the deviation goes beyond the RX IF filter BW limits or increasing audio distortion as the filter BW is exceeded. Most of the radios used for repeaters in my care are now of the more recent PMR type in interests of improved reliability.

Regards,
Bob, G3VVT

554. LCD screen

Yahoo group: electrichandbag
Date: 2013-02-24 22:32:24 UTC
From: g4ufs
Topic: 554 Message: 554

Hi,

There seems to be a common problem with some 290s where the screen "bleeds". I have one such screen which is so bad that I can only make out the first digit :(

Has anyone any idea if this can be repaired some way or where I might get a replacement.

Has anyone ever seen a conversion to an LCD perhaps?

Regards
Dave
G4UFS

555. Re: LCD screen

Yahoo group: electrichandbag
Date: 2013-02-25 14:46:28 UTC
From: g3vvt@...
Topic: 554 Message: 555

Hi Dave,

The only answer is to replace the LCD unit. Unsure whether there would be any chance of obtaining a replacement from Yaesu UK, but I did manage fairly recently to buy a replacement volume/squelch/ON-OFF control through them for my FT-480R which is a similar vintage.

The problem can occur when the radio is stored in an outside environment. I used to have an external shack that was just that, a wooden hut in the garden and lost several LCD displays in devices stored there. The LCD display does not always tolerate low temperatures and gives the effect you note in protest. Unsure if modern LCD are so afflicted, but early versions certainly were.

If a new LCD display cannot be obtained the choices are to maybe adapt one intended for another use, though that is probably highly unlikely to be suitable as this is a specialised device. The only other alternative is to get hold of an LCD display from a scrap FT-290R or FT-290RII depending on your version. If you can get hold of the Yaesu part number for the LCD a search of the Internet may possibly help.

As a side issue Geoff Brown who in the past supplied older model Yaesu service manuals or good copies where the originals were not available seems to have fallen off the radar. Anybody aware of a possible new link to him and the business? The link to his web site no longer works.

Regards,
Bob, G3VVT

556. Re: LCD screen

Yahoo group: electrichandbag
Date: 2013-02-25 23:46:52 UTC
From: M1CXK
Topic: 554 Message: 556

Hi Bob

Try
Rosscom radio communications

73
Allen M1CXK

557. Re: LCD screen

Yahoo group: electrichandbag
Date: 2013-02-26 14:48:58 UTC
From: g3vvt@...
Topic: 554 Message: 557

Hi Allen,

Yes, that is the new link to the Yaesu manuals from Geoff Brown, G4ICD. The new address for the manuals themselves is: _www.yaesumanuals.co.uk/_ (http://www.yaesumanuals.co.uk/)
Always handy to have for Yaesu manuals no longer in print.

Regards,
Bob, G3VVT

558. Re: LCD screen

Yahoo group: electrichandbag
Date: 2013-03-02 10:40:59 UTC
From: g4ufs
Topic: 554 Message: 558

Thanks Bob,

I have tried all the usual places but nothing turning up so far. I guess I will have to hold on until some one is selling one on eBay. It's a shame I got the radio a couple of weeks ago and only the week prior, there was one on eBay :(

Regards
Dave

--- In electrichandbag@yahoogroups.com, g3vvt@... wrote:
>
> Hi Dave,
>
> The only answer is to replace the LCD unit. Unsure whether there would be
> any chance of obtaining a replacement from Yaesu UK, but I did manage fairly
> recently to buy a replacement volume/squelch/ON-OFF control through them
> for my FT-480R which is a similar vintage.
>
> The problem can occur when the radio is stored in an outside environment.
> I used to have an external shack that was just that, a wooden hut in the
> garden and lost several LCD displays in devices stored there. The LCD display
> does not always tolerate low temperatures and gives the effect you note in
> protest. Unsure if modern LCD are so afflicted, but early versions
> certainly were.
>
> If a new LCD display cannot be obtained the choices are to maybe adapt one
> intended for another use, though that is probably highly unlikely to be
> suitable as this is a specialised device. The only other alternative is to get
> hold of an LCD display from a scrap FT-290R or FT-290RII depending on your
> version. If you can get hold of the Yaesu part number for the LCD a search
> of the Internet may possibly help.
>
> As a side issue Geoff Brown who in the past supplied older model Yaesu
> service manuals or good copies where the originals were not available seems to
> have fallen off the radar. Anybody aware of a possible new link to him and
> the business? The link to his web site no longer works.
>
> Regards,
> Bob, G3VVT
>

559. Re: LCD screen

Yahoo group: electrichandbag
Date: 2013-03-02 10:42:20 UTC
From: g4ufs
Topic: 554 Message: 559

Hi Allen,

It was the first place I tried and was quite hopeful but they had nothing :(

Dave

--- In electrichandbag@yahoogroups.com, "M1CXK" <ALLENCrdr@...> wrote:
>
>
>
>
> Hi Bob
>
> Try
> Rosscom radio communications
>
> 73
> Allen M1CXK
>

560. Re: [electrichandbag] Re: LCD screen

Yahoo group: electrichandbag
Date: 2013-03-02 11:41:37 UTC
From: Gordon JC Pearce
Topic: 554 Message: 560

On 25/02/13 14:46, g3vvt@... wrote:

> If a new LCD display cannot be obtained the choices are to maybe adapt
> one intended for another use, though that is probably highly unlikely to
> be suitable as this is a specialised device

There must be some sort of tiny little LCD that will physically fit the front panel. The clever bit will be reverse-engineering the serial protocol from the FTx90 control board to the LCD, and then once that's out the way it will only be a case of making up a wee microcontroller board to interpret that and drive the "new" LCD.

Simple, eh?

--
Gordonjcp MM0YEQ

561. Re: LCD screen

Yahoo group: electrichandbag
Date: 2013-03-04 00:15:28 UTC
From: g4ufs
Topic: 554 Message: 561

Actually it's not beyond the realms of possibility. The connector to the screen has 9 pins. 2 of those are for power, leaving 7 data pins. I have already scoped those hoping for inspiration but nothing is jumping out at me. I'll need a logic analyser to make more sense.

'Have not seen LCDs on the hobby market that size but a small bank of 7 segment LEDs might do the job. Programming a PIC micro would be pretty simple if I could crack the protocol from the CPU. I had a look at the LCD controller chip but there doesn't seem to be a data sheet for it :(

--- In electrichandbag@yahoogroups.com, Gordon JC Pearce <gordon@...> wrote:
>
> On 25/02/13 14:46, g3vvt@... wrote:
>
> > If a new LCD display cannot be obtained the choices are to maybe adapt
> > one intended for another use, though that is probably highly unlikely to
> > be suitable as this is a specialised device
>
> There must be some sort of tiny little LCD that will physically fit the
> front panel. The clever bit will be reverse-engineering the serial
> protocol from the FTx90 control board to the LCD, and then once that's
> out the way it will only be a case of making up a wee microcontroller
> board to interpret that and drive the "new" LCD.
>
> Simple, eh?
>
> --
> Gordonjcp MM0YEQ
>

562. Re: [electrichandbag] Re: LCD screen

Yahoo group: electrichandbag
Date: 2013-03-04 08:10:52 UTC
From: Gordon JC Pearce
Topic: 554 Message: 562

On 04/03/13 00:15, g4ufs wrote:
> Actually it's not beyond the realms of possibility. The connector to
> the screen has 9 pins. 2 of those are for power, leaving 7 data pins.
> I have already scoped those hoping for inspiration but nothing is
> jumping out at me. I'll need a logic analyser to make more sense.

I believe it is four data lines, and a couple of latch lines.

> 'Have not seen LCDs on the hobby market that size but a small bank of
> 7 segment LEDs might do the job. Programming a PIC micro would be
> pretty simple if I could crack the protocol from the CPU. I had a
> look at the LCD controller chip but there doesn't seem to be a data
> sheet for it :(

I'd use an AVR rather than PIC, because PIC is slower, more power-hungry
and has horrible programming requirements. I'm not especially keen on
using stuff without a Free-as-in-Speech toolchain for amateur radio
stuff, either.

--
Gordonjcp MM0YEQ

563. Re: LCD screen

Yahoo group: electrichandbag
Date: 2013-03-04 19:18:15 UTC
From: workherz
Topic: 554 Message: 563

Hi Bob, might be able to help, I have a ft290 here with the ALC problem. I had to remove Q1014 to get it to work. (been unable to get to the bottom of it so far, another story). Apart from that its all working, even has a spare PA transistor Q2022.
Your welcome to it for a reasonable offer.
John

--- In electrichandbag@yahoogroups.com, "g4ufs" <g4ufs@...> wrote:
>
>
> Hi Allen,
>
> It was the first place I tried and was quite hopeful but they had nothing :(
>
> Dave
>
>
> --- In electrichandbag@yahoogroups.com, "M1CXK" <ALLENCrdr@> wrote:
> >
> >
> >
> >
> > Hi Bob
> >
> > Try
> > Rosscom radio communications
> >
> > 73
> > Allen M1CXK
> >
>

564. Looking for amp

Yahoo group: electrichandbag
Date: 2013-04-05 22:19:11 UTC
From: kf7bsf
Topic: 564 Message: 564

I'm looking for the clip-on amp for an FT-790R2. Does anyone have ideas about where I might locate one?

Thanks,
Gene

565. FT 290 Mk1 RX problem

Yahoo group: electrichandbag
Date: 2013-04-22 22:15:16 UTC
From: m0xvf
Topic: 565 Message: 565

Hello Group,

I have acquired a Yaesu FT 290 Mk1 which I had intended for spares for my ageing Sommerkamp FT 290, but everything works apart from the RX and it seems a bit too good to throw in the junk box.The rx works for a very short time from switch on then just dies with the odd crackle from the speaker after that, but it still tx with audio. Can anyone shed any light on this-I'd love to get it working if possible.The speaker is fine and so is the volume pot.

Jeremy
M0XVF

566. Thank you!

Yahoo group: electrichandbag
Date: 2013-04-14 10:46:29 UTC
From: Panagiotis Perreas
Topic: 566 Message: 566

Martin et all.
Thank you for accepting me to the group.
I promise, I will behave myself!

73

Panos - SV3AUW/ M0LPT

sv3auw.blogspot.co.uk

567. Re: FT 290 Mk1 RX problem

Yahoo group: electrichandbag
Date: 2013-04-26 10:56:19 UTC
From: Michele
Topic: 565 Message: 567

Hi Jeremy,
my FT290R MkI was also behaving oddly on RX.. sometimes the S-meter was going up with no signal (a classic !), or there was no audio for a while, after power-on.
I tried to replace some electrolytic capacitors "here and there" in the RX chain, where it seemed more appropriate, but with no luck... the malfunctions were still there !
So I took the "hard way" and replaced ALL the 40-something electrolytic capacitors, no matter where they were. It took me 10 euros of components and several hours of (part-time) work, but after that the FT290 behaved like new... no more problems, clear audio both on RX and TX.
So my advice is: replace them all, then see what happens...
73,

Michele IZ2EAS

--- In electrichandbag@yahoogroups.com, "m0xvf" <m0xvf@...> wrote:
>
> Hello Group,
>
> I have acquired a Yaesu FT 290 Mk1 which I had intended for spares for my ageing Sommerkamp FT 290, but everything works apart from the RX and it seems a bit too good to throw in the junk box.The rx works for a very short time from switch on then just dies with the odd crackle from the speaker after that, but it still tx with audio. Can anyone shed any light on this-I'd love to get it working if possible.The speaker is fine and so is the volume pot.
>
> Jeremy
> M0XVF
>

568. Re: [electrichandbag] Re: FT 290 Mk1 RX problem

Yahoo group: electrichandbag
Date: 2013-04-26 17:33:23 UTC
From: Jeremy Smith
Topic: 565 Message: 568

Hi Michele,

Thanks for the reply.The S meter works fine, but im certain the problem lies with capacitors. I hadnt banked on replacing all of them but I will make a start in some places and take it from there.
Cheers
Jeremy
M0XVF

On Fri, Apr 26, 2013 11:56 BST Michele wrote:

>
>Hi Jeremy,
>my FT290R MkI was also behaving oddly on RX.. sometimes the S-meter was going up with no signal (a classic !), or there was no audio for a while, after power-on.
>I tried to replace some electrolytic capacitors "here and there" in the RX chain, where it seemed more appropriate, but with no luck... the malfunctions were still there !
>So I took the "hard way" and replaced ALL the 40-something electrolytic capacitors, no matter where they were. It took me 10 euros of components and several hours of (part-time) work, but after that the FT290 behaved like new... no more problems, clear audio both on RX and TX.
>So my advice is: replace them all, then see what happens...
>73,
>
>Michele IZ2EAS
>
>
>--- In electrichandbag@yahoogroups.com, "m0xvf" <m0xvf@...> wrote:
>>
>> Hello Group,
>>
>> I have acquired a Yaesu FT 290 Mk1 which I had intended for spares for my ageing Sommerkamp FT 290, but everything works apart from the RX and it seems a bit too good to throw in the junk box.The rx works for a very short time from switch on then just dies with the odd crackle from the speaker after that, but it still tx with audio. Can anyone shed any light on this-I'd love to get it working if possible.The speaker is fine and so is the volume pot.
>>
>> Jeremy
>> M0XVF
>>
>
>

569. Re: FT 290 Mk1 RX problem

Yahoo group: electrichandbag
Date: 2013-04-29 00:18:39 UTC
From: g4ufs
Topic: 565 Message: 569

Hi Jetemy,

I sent you mail to your personal mail address but you may not have received it.

I had the exact same fault and pinned it down to an electrolytic in the audio amp. If you wiggle the caps around the amplifier chip you should hear the his come and go.

It took the best part of 15 minutes to replace :)

Good luck

Dave
G4UFS

--- In electrichandbag@yahoogroups.com, "m0xvf" <m0xvf@...> wrote:
>
> Hello Group,
>
> I have acquired a Yaesu FT 290 Mk1 which I had intended for spares for my ageing Sommerkamp FT 290, but everything works apart from the RX and it seems a bit too good to throw in the junk box.The rx works for a very short time from switch on then just dies with the odd crackle from the speaker after that, but it still tx with audio. Can anyone shed any light on this-I'd love to get it working if possible.The speaker is fine and so is the volume pot.
>
> Jeremy
> M0XVF
>

570. Re: [electrichandbag] Re: FT 290 Mk1 RX problem

Yahoo group: electrichandbag
Date: 2013-04-29 07:27:53 UTC
From: Jeremy Smith
Topic: 565 Message: 570

Hi Dave ,

Yes I got your email I really appreciate the help.I replied to your yahoo address perhaps it is in your spam box ?

Many thanks,

Jeremy
M0XVF

On Mon, Apr 29, 2013 01:18 BST g4ufs wrote:

>
>Hi Jetemy,
>
>I sent you mail to your personal mail address but you may not have received it.
>
>I had the exact same fault and pinned it down to an electrolytic in the audio amp. If you wiggle the caps around the amplifier chip you should hear the his come and go.
>
>It took the best part of 15 minutes to replace :)
>
>Good luck
>
>Dave
>G4UFS
>
>
>--- In electrichandbag@yahoogroups.com, "m0xvf" <m0xvf@...> wrote:
>>
>> Hello Group,
>>
>> I have acquired a Yaesu FT 290 Mk1 which I had intended for spares for my ageing Sommerkamp FT 290, but everything works apart from the RX and it seems a bit too good to throw in the junk box.The rx works for a very short time from switch on then just dies with the odd crackle from the speaker after that, but it still tx with audio. Can anyone shed any light on this-I'd love to get it working if possible.The speaker is fine and so is the volume pot.
>>
>> Jeremy
>> M0XVF
>>
>
>

571. Re: [electrichandbag] Re: FT 290 Mk1 RX problem

Yahoo group: electrichandbag
Date: 2013-04-29 22:55:36 UTC
From: Dave P
Topic: 565 Message: 571

Hi Jeremy,

Just checked and your mail is indeed in the spam box.

The audio amp is, as you suggest, Q1027. The cap I replaced was C132 but any of the electrolytics can fail which is why some people choose to do a full replacement. Most modern electrolytics will dome over the top when they fail but older ones have different cans.

I was really pleased when I bought my 290. It was fully working for the first 15 minutes and then the audio just faded as if I had turned the volume down. Leaving it on, it would intermittently fade back for a while and then fade to nothing again. I think heat was affecting it.

If your fault sounds similar then I'd put money on it being the above. Let me know how you get on

73
Dave
G4UFS

On 29 Apr 2013, at 08:27, Jeremy Smith <m0xvf@...> wrote:

>
> Hi Dave ,
>
> Yes I got your email I really appreciate the help.I replied to your yahoo address perhaps it is in your spam box ?
>
> Many thanks,
>
> Jeremy
> M0XVF
>
> ------------------------------
> On Mon, Apr 29, 2013 01:18 BST g4ufs wrote:
>
> >
> >Hi Jetemy,
> >
> >I sent you mail to your personal mail address but you may not have received it.
> >
> >I had the exact same fault and pinned it down to an electrolytic in the audio amp. If you wiggle the caps around the amplifier chip you should hear the his come and go.
> >
> >It took the best part of 15 minutes to replace :)
> >

> >Good luck
> >
> >Dave
> >G4UFS
> >
> >
> >--- In electrichandbag@yahoogroups.com, "m0xvf" <m0xvf@...> wrote:
> >>
> >> Hello Group,
> >>
> >> I have acquired a Yaesu FT 290 Mk1 which I had intended for spares for my ageing Sommerkamp FT 290, but everything works apart from the RX and it seems a bit too good to throw in the junk box.The rx works for a very short time from switch on then just dies with the odd crackle from the speaker after that, but it still tx with audio. Can anyone shed any light on this-I'd love to get it working if possible.The speaker is fine and so is the volume pot.
> >>
> >> Jeremy
> >> M0XVF
> >>
> >
> >
>
>

572. Re: [electrichandbag] Re: FT 290 Mk1 RX problem

Yahoo group: electrichandbag
Date: 2013-05-01 20:40:20 UTC
From: Jeremy Smith
Topic: 565 Message: 572

Hello again group,

A quick update to the 290 rx problem. I have changed half a dozen caps around the audio amp but no success yes. However upon removing the battery tray it was painfully apparent that someone had tried something like this before with a hot poker.......

Jeremy
M0XVF

On Mon, Apr 29, 2013 01:18 BST g4ufs wrote:

>
>Hi Jetemy,
>
>I sent you mail to your personal mail address but you may not have received it.
>
>I had the exact same fault and pinned it down to an electrolytic in the audio amp. If you wiggle the caps around the amplifier chip you should hear the his come and go.
>
>It took the best part of 15 minutes to replace :)
>
>Good luck
>
>Dave
>G4UFS
>
>
>--- In electrichandbag@yahoogroups.com, "m0xvf" <m0xvf@...> wrote:
>>
>> Hello Group,
>>
>> I have acquired a Yaesu FT 290 Mk1 which I had intended for spares for my ageing Sommerkamp FT 290, but everything works apart from the RX and it seems a bit too good to throw in the junk box.The rx works for a very short time from switch on then just dies with the odd crackle from the speaker after that, but it still tx with audio. Can anyone shed any light on this-I'd love to get it working if possible.The speaker is fine and so is the volume pot.
>>
>> Jeremy
>> M0XVF
>>
>
>

573. Re: [electrichandbag] Re: FT 290 Mk1 RX problem

Yahoo group: electrichandbag
Date: 2013-05-01 21:16:16 UTC
From: Gordon JC Pearce
Topic: 565 Message: 573

On 01/05/13 21:40, Jeremy Smith wrote:
>
>
> Hello again group,
>
> A quick update to the 290 rx problem. I have changed half a dozen
> caps around the audio amp but no success yes. However upon removing
> the battery tray it was painfully apparent that someone had tried
> something like this before with a hot poker.......
>
> Jeremy M0XVF
>

This is why shotgunning parts is never a solution!

There must be a *reason* why it's misbehaving, and just saying "oh it's got bad caps" isn't the reason. Take your time and try to undo some of the previous butchery ;-)

FWIW I have replaced about a dozen genuinely faulty electrolytics in about 20-odd years of repairing stuff, and more faulty ceramic caps this year than I can even remember...

--
Gordonjcp MM0YEQ

574. Re: [electrichandbag] Re: FT 290 Mk1 RX problem

Yahoo group: electrichandbag
Date: 2013-05-11 20:25:51 UTC
From: Jeremy Smith
Topic: 565 Message: 574

Hello Group,

Sorry about the delay in reposting but.....

After spending time making good a previous repair, I have replaced all the caps and as a good few of you had stated before, after removing some of them-and only after removing them-you could tell they were past their best.
The FT 290 has now been working for a week with absolutely no problem,good audio reports, brilliant RX and plenty of contacts made.So rather than have a spares donor for my Sommerkamp 290, I have a spare radio.The radio with be going on an unlimited forever loan to a good friend of mine, a disabled G4 who had to sell his previous 2m multimode to fund new batteries for his wheelchair.He will be smiling tomorrow as he knows nothing of this.
Thank you to all members of the group that helped me with this repair-its really put a smile on my face to hear the white noise of the RX finally !

73 and very many thanks,

Jeremy M0XVF

From: Gordon JC Pearce <gordon@...>
To: electrichandbag@yahoogroups.com
Sent: Wednesday, 1 May 2013, 22:16
Subject: Re: [electrichandbag] Re: FT 290 Mk1 RX problem

On 01/05/13 21:40, Jeremy Smith wrote:
>
>
> Hello again group,
>
> A quick update to the 290 rx problem. I have changed half a dozen
> caps around the audio amp but no success yes. However upon removing
> the battery tray it was painfully apparent that someone had tried
> something like this before with a hot poker.....
>
> Jeremy M0XVF
>

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There must be a *reason* why it's misbehaving, and just saying "oh it's got bad caps" isn't the reason. Take your time and try to undo some of the previous butchery ;-)

FWIW I have replaced about a dozen genuinely faulty electrolytics in about 20-odd years of repairing stuff, and more faulty ceramic caps this year than I can even remember...

--
Gordonjcp MM0YEQ

575. Re: [electrichandbag] Re: FT 290 Mk1 RX problem

Yahoo group: electrichandbag
Date: 2013-05-12 09:34:17 UTC
From: Mansueto Grech
Topic: 565 Message: 575

Well done Jeremy on both counts. I am sure you friend will appreciate the "loan" and maybe who knows He might even get to 9H via ES. Hi hi
Question for the group. Anyone has a component layout for the 290R ?
Thanks in advance
73's
Mans 9H1GB
On May 11, 2013 11:43 PM, "Jeremy Smith" <m0xvf@....uk> wrote:

> **
>
>
> Hello Group,
>
> Sorry about the delay in reposting but.....................
>
> After spending time making good a previous repair, I have replaced all
> the caps and as a good few of you had stated before, after removing some of
> them-and only after removing them-you could tell they were past their best.
> The FT 290 has now been working for a week with absolutely no
> problem,good audio reports, brilliant RX and plenty of contacts made.So
> rather than have a spares donor for my Sommerkamp 290, I have a spare
> radio.The radio with be going on an unlimited forever loan to a good friend
> of mine, a disabled G4 who had to sell his previous 2m multimode to fund
> new batteries for his wheelchair.He will be smiling tomorrow as he knows
> nothing of this.
> Thank you to all members of the group that helped me with this repair-its
> really put a smile on my face to hear the white noise of the RX finally !
>
> 73 and very many thanks,
>
> Jeremy M0XVF
>
> *From:* Gordon JC Pearce <gordon@...>
> *To:* electrichandbag@yahoogroups.com
> *Sent:* Wednesday, 1 May 2013, 22:16
> *Subject:* Re: [electrichandbag] Re: FT 290 Mk1 RX problem
> **
>
> On 01/05/13 21:40, Jeremy Smith wrote:
> >
> >
> > Hello again group,
> >
> > A quick update to the 290 rx problem. I have changed half a dozen
> > caps around the audio amp but no success yes. However upon removing

> > the battery tray it was painfully apparent that someone had tried
> > something like this before with a hot poker.......
> >
> > Jeremy M0XVF
> >
>
> This is why shotgunning parts is never a solution!
>
> There must be a *reason* why it's misbehaving, and just saying "oh it's
> got bad caps" isn't the reason. Take your time and try to undo some of
> the previous butchery ;-)
>
> FWIW I have replaced about a dozen genuinely faulty electrolytics in
> about 20-odd years of repairing stuff, and more faulty ceramic caps this
> year than I can even remember...
>
> --
> Gordonjcp MM0YEQ
> ****
>
>

576. Re: FT 290 Mk1 RX problem

Yahoo group: electrichandbag
Date: 2013-05-13 11:55:13 UTC
From: Michele
Topic: 565 Message: 576

Good Job Jeremy !

Electrolytic capacitors are a well-known weakness of the FT290R, and after 30 years they have well passed they expected life.

Since the radio is open and dismantled, it takes much less time and it is much less frustrating to change all of them.. the ones that haven't failed yet, will fail in a short time anyway (and could take some semiconductors with them...) !

I am sure you (or your friend) will experience a long time of trouble-free operations with the restored FT290R.

73,

Michele IZ2EAS

--- In electrichandbag@yahoogroups.com, Jeremy Smith <m0xvf@...> wrote:
>
> Hello Group,
> Â
> Sorry about the delay in reposting but.....................
> Â
> Â After spending time making good aÂ previous repair, I have replaced all the caps and as a good few of you had stated before, after removing some of them-and only after removing them-you could tell they were past their best.
> Â The FT 290 has now been working for a week with absolutely no problem,good audio reports, brilliant RX and plenty of contacts made.So rather than have aÂ spares donor for my Sommerkamp 290, I have a spare radio.The radio with be going onÂ an unlimited forever loan toÂ a good friend of mine, a disabled G4 who had to sell his previous 2m multimode to fund new batteries for his wheelchair.He will be smiling tomorrow as he knows nothing of this.
> Â Thank you to all members of the group that helped me with this repair-its really put a smile on my face to hear the white noise of the RX finally !
> Â
> 73 and very many thanks,
> Â
> Jeremy M0XVF
>
>
> _____
> From: Gordon JC Pearce <gordon@...>
> To: electrichandbag@yahoogroups.com
> Sent: Wednesday, 1 May 2013, 22:16
> Subject: Re: [electrichandbag] Re: FT 290 Mk1 RX problem
>
> Â

> On 01/05/13 21:40, Jeremy Smith wrote:
> >
> >
> > Hello again group,
> >
> > A quick update to the 290 rx problem. I have changed half a dozen
> > caps around the audio amp but no success yes. However upon removing
> > the battery tray it was painfully apparent that someone had tried
> > something like this before with a hot poker.......
> >
> > Jeremy M0XVF
> >
>
> This is why shotgunning parts is never a solution!
>
> There must be a *reason* why it's misbehaving, and just saying "oh it's
> got bad caps" isn't the reason. Take your time and try to undo some of
> the previous butchery ;-)
>
> FWIW I have replaced about a dozen genuinely faulty electrolytics in
> about 20-odd years of repairing stuff, and more faulty ceramic caps this
> year than I can even remember...
>
> --
> Gordonjcp MM0YEQ
>

577. New file uploaded to electrichandbag

Yahoo group: electrichandbag
Date: 2013-06-03 21:55:40 UTC
From: electrichandbag@yahoogroups.com
Topic: 2 Message: 577

Hello,

This email message is a notification to let you know that
a file has been uploaded to the Files area of the electrichandbag
group.

File : /Component Layouts/FT-290R Board Layout.pdf
Uploaded by : jeryb77 <jeryb77@...>
Description :

You can access this file at the URL:
http://groups.yahoo.com/group/electrichandbag/files/Component%20Layouts/FT-290R%20Board%20Layout.pdf

To learn more about file sharing for your group, please visit:
http://help.yahoo.com/l/us/yahoo/groups/original/members/web/index.html
Regards,

jeryb77 <jeryb77@...>

578. New file uploaded to electrichandbag

Yahoo group: electrichandbag
Date: 2013-06-03 21:56:43 UTC
From: electrichandbag@yahoogroups.com
Topic: 2 Message: 578

Hello,

This email message is a notification to let you know that
a file has been uploaded to the Files area of the electrichandbag
group.

File : /Component Layouts/FT-790R Board Layout.pdf
Uploaded by : jeryb77 <jeryb77@...>
Description :

You can access this file at the URL:
http://groups.yahoo.com/group/electrichandbag/files/Component%20Layouts/FT-790R%20Board%20Layout.pdf

To learn more about file sharing for your group, please visit:
http://help.yahoo.com/l/us/yahoo/groups/original/members/web/index.html
Regards,

jeryb77 <jeryb77@...>

579. New file uploaded to electrichandbag

Yahoo group: electrichandbag
Date: 2013-06-03 22:10:46 UTC
From: electrichandbag@yahoogroups.com
Topic: 2 Message: 579

Hello,

This email message is a notification to let you know that
a file has been uploaded to the Files area of the electrichandbag
group.

File : /FT-290R PLL Voltages.pdf
Uploaded by : jeryb77 <jeryb77@...>
Description : FT-290R PLL Voltage Chart

You can access this file at the URL:
http://groups.yahoo.com/group/electrichandbag/files/FT-290R%20PLL%20Voltages.pdf

To learn more about file sharing for your group, please visit:
http://help.yahoo.com/l/us/yahoo/groups/original/members/web/index.html
Regards,

jeryb77 <jeryb77@...>

580. New file uploaded to electrichandbag

Yahoo group: electrichandbag
Date: 2013-06-03 22:12:04 UTC
From: electrichandbag@yahoogroups.com
Topic: 2 Message: 580

Hello,

This email message is a notification to let you know that
a file has been uploaded to the Files area of the electrichandbag
group.

File : /FT-290R Sig Leak Mod.pdf
Uploaded by : jeryb77 <jeryb77@...>
Description : FT-290R Reference Signal Leak Mod

You can access this file at the URL:
http://groups.yahoo.com/group/electrichandbag/files/FT-290R%20Sig%20Leak%20Mod.pdf

To learn more about file sharing for your group, please visit:
http://help.yahoo.com/l/us/yahoo/groups/original/members/web/index.html
Regards,

jeryb77 <jeryb77@...>

581. New Files Uploaded

Yahoo group: electrichandbag
Date: 2013-06-03 22:17:10 UTC
From: jeryb77
Topic: 581 Message: 581

Hi All,
I was looking through some of my files and found some FT-290 and Ft-790 documents. These are all for the original MKI Series.

I scanned everything I found and have uploaded them.

FT-290R
Main Board Component Layout
PLL Voltage Chart
Reference Signal Leak Mod

FT-790R
Main Board Component Layout

I'm sure many will welcome the board layout files.

73,
Jerry
WA8R

582. Re: New Files Uploaded

Yahoo group: electrichandbag
Date: 2013-06-04 09:05:08 UTC
From: Michele
Topic: 581 Message: 582

Thanks Jerry !

Michele

--- In electrichandbag@yahoogroups.com, "jeryb77" <jeryb77@...> wrote:
>
> Hi All,
> I was looking through some of my files and found some FT-290 and Ft-790 documents. These are all for the original MKI Series.
>
> I scanned everything I found and have uploaded them.
>
> FT-290R
> Main Board Component Layout
> PLL Voltage Chart
> Reference Signal Leak Mod
>
> FT-790R
> Main Board Component Layout
>
> I'm sure many will welcome the board layout files.
>
> 73,
> Jerry
> WA8R
>

583. Re: [electrichandbag] New Files Uploaded

Yahoo group: electrichandbag
Date: 2013-06-04 10:23:43 UTC
From: Mansueto Grech
Topic: 581 Message: 583

Hi Jerry,
Thanks. for that.
Can I ask in which folder are the
FT-290R
PLL Voltage Chart
Reference Signal Leak Mod
as I can't seem to find them please.
Again
Thanks and 73's
Mans. 9H1GB

On 4 June 2013 00:17, jeryb77 <jeryb77@hotmail.com> wrote:

> **
>
>
> Hi All,
> I was looking through some of my files and found some FT-290 and Ft-790
> documents. These are all for the original MKI Series.
>
> I scanned everything I found and have uploaded them.
>
> FT-290R
> Main Board Component Layout
> PLL Voltage Chart
> Reference Signal Leak Mod
>
> FT-790R
> Main Board Component Layout
>
> I'm sure many will welcome the board layout files.
>
> 73,
> Jerry
> WA8R
>
>
>

584. Re: [electrichandbag] New Files Uploaded

Yahoo group: electrichandbag
Date: 2013-06-04 13:44:23 UTC
From: jeryb77
Topic: 581 Message: 584

Hi Mans,

Just click on the "Files" section.

They are listed there and not in individual folders.

FT-290R PLL Voltages.pdf

FT-290R Sig Leak Mod.pdf

73,
Jerry
WA8R
----- Original Message -----
From: Mansueto Grech
To: electrichandbag@yahoogroups.com
Sent: Tuesday, June 04, 2013 6:23 AM
Subject: Re: [electrichandbag] New Files Uploaded

Hi Jerry,
Thanks. for that.
Can I ask in which folder are the
FT-290R
PLL Voltage Chart
Reference Signal Leak Mod
as I can't seem to find them please.
Again
Thanks and 73's
Mans. 9H1GB

585. Re: [electrichandbag] New Files Uploaded

Yahoo group: electrichandbag
Date: 2013-06-04 16:33:04 UTC
From: Mansueto Grech
Topic: 581 Message: 585

Hi Jerry,
Thanks for the reply.
73's
Mans. 9H1GB
On Jun 4, 2013 3:44 PM, "jeryb77" <jeryb77@...> wrote:

> **
>
>
> **
> Hi Mans,
>
> Just click on the "Files" section.
>
> They are listed there and not in individual folders.
>
> FT-290R PLL Voltages.pdf<http://f1.grp.yahoofs.com/v1/9O2tUfluFcn2ghQEE38zyh2rn8IhqhlvuTfDH_FvgIMUgeHqZzHyZaBtm6a54TEzINPGwkCrrp9ROa218NHrEher7kNO5Q/FT-290R%20PLL%20Voltages.pdf>
>
> FT-290R Sig Leak Mod.pdf<http://f1.grp.yahoofs.com/v1/9O2tUXSbW732ghQEB7AWiIq0rFEClbuU4dsBEAeL7wjgxNcyJuyNg9YYV3Vv060plbgiC0erAnAfJRCJduNn89Kc7ANhHA/FT-290R%20Sig%20Leak%20Mod.pdf>
>
> 73,
> Jerry
> WA8R
>
> ----- Original Message -----
> *From:* Mansueto Grech <mansueto.grech@...>
> *To:* electrichandbag@yahoogroups.com
> *Sent:* Tuesday, June 04, 2013 6:23 AM
> *Subject:* Re: [electrichandbag] New Files Uploaded
>
> Hi Jerry,
> Thanks. for that.
> Can I ask in which folder are the
> FT-290R
> PLL Voltage Chart
> Reference Signal Leak Mod
> as I can't seem to find them please.
> Again
> Thanks and 73's
> Mans. 9H1GB
>
>

>

586. Re: New Files Uploaded

Yahoo group: electrichandbag
Date: 2013-06-04 09:28:17 UTC
From: dbztuzujdhgtrjzthxh
Topic: 581 Message: 586

Stunning Jerry,
Thanks very much,
73
ian

--- In electrichandbag@yahoogroups.com, "jeryb77" <jeryb77@...> wrote:
>
> Hi All,
> I was looking through some of my files and found some FT-290 and Ft-790 documents. These are all for the original MKI Series.
>
> I scanned everything I found and have uploaded them.
>
> FT-290R
> Main Board Component Layout
> PLL Voltage Chart
> Reference Signal Leak Mod
>
> FT-790R
> Main Board Component Layout
>
> I'm sure many will welcome the board layout files.
>
> 73,
> Jerry
> WA8R
>

587. Re: New Files Uploaded

Yahoo group: electrichandbag
Date: 2013-06-05 03:18:23 UTC
From: jeryb77
Topic: 581 Message: 587

For anyone else looking for these files, I have moved them to a folder named "FT-290R PLL"

73,
Jerry
WA8R

> ----- Original Message -----
> From: Mansueto Grech
> To: electrichandbag@yahoogroups.com
> Sent: Tuesday, June 04, 2013 6:23 AM
> Subject: Re: [electrichandbag] New Files Uploaded
>
>
>
>
> Hi Jerry,
> Thanks. for that.
> Can I ask in which folder are the
> FT-290R
> PLL Voltage Chart
> Reference Signal Leak Mod
> as I can't seem to find them please.
> Again
> Thanks and 73's
> Mans. 9H1GB
>

588. 290 and modern data modes?

Yahoo group: electrichandbag
Date: 2013-06-29 22:21:37 UTC
From: zaktherabbit
Topic: 588 Message: 588

Im wondering if anyone is using their FT-290 to run modern QRP/weak signal data modes, such as WSPR/JT-65?

If so, how are you finding its performance? In particular, are you finding it frequency stable enough?

589. Re: 290 and modern data modes?

Yahoo group: electrichandbag
Date: 2013-06-30 09:27:55 UTC
From: zl1ujg
Topic: 588 Message: 589

Hi,
I tried running the FT290R11 on FSK441 but the PA is next to the crystal oscillator for the PLL so there is drift.
Kevin
ZL1UJG

--- In electrichandbag@yahoogroups.com, "zaktherabbit" <barfield673@...> wrote:
>
> Im wondering if anyone is using their FT-290 to run modern QRP/weak signal data modes, such as WSPR/JT-65?
>
> If so, how are you finding its performance? In particular, are you finding it frequency stable enough?
>

590. Texas device TP0401N

Yahoo group: electrichandbag
Date: 2013-07-12 16:47:44 UTC
From: Naqoyqatsi (aka the ICM)
Topic: 590 Message: 590

I am desperately trying to find the data and pin outs for this device which is the LCD driver on the 290/690/790 (and other) rigs.
Texas have been no use and neither have Yaesu and countless searches on the net have come up with nothing.
Does any body on this group happen to have the Texas data on this chip?

Thanks

Slim G4IPZ

591. Re: 290 and modern data modes?

Yahoo group: electrichandbag
Date: 2013-08-03 11:44:38 UTC
From: m0jsw
Topic: 588 Message: 591

--- In electrichandbag@yahoogroups.com, "zaktherabbit" <barfield673@...> wrote:
>
> Im wondering if anyone is using their FT-290 to run modern QRP/weak signal data modes, such as WSPR/JT-65?
>
> If so, how are you finding its performance? In particular, are you finding it frequency stable enough?
>
First of all,as this is my first post,Hi to all the group and thanks for letting me join. I am just in the process of setting up my first serious attempt at working vhf and one of the thing I am very keen on is using the data modes.I`ll be very happy to share my results and will be very keen to hear the results of others,in particular our european members.....Jes m0jsw

592. FT-290R with FM problem

Yahoo group: electrichandbag
Date: 2013-08-04 23:02:39 UTC
From: peterwalker1999
Topic: 592 Message: 592

I have a FT290R mk1, and it has a problem with FM recieve.
FM TX is OK, and all SSB and CW are fine.

The problem is intermittent sensitivity.

When the radio is turned on it works fine, but after about 10 mins the FM audio starts to drop out erratically (either there or it is not there) getting wors and worse untill it is not there all the time.

The CW and SSB recieve is OK during this, and the S meter deflection does not change. With the loss of audio the FM "hash" in the background is present, so it is not an audio problem, or a squelch problem. It just sounds like the recieved signal has deopped in signal strength.

As CW and SSB are unaffected, this indicates a problem on the second IF and Q1019 the FM demodulator chip.

The problem seems to be temperature related, so I have given the components around Q1019 a good blast with a freezer spray, but resulted in no change.

Tapping the board, flexing the board, and wiggling components and wires has resulted in no change!

I have changed Q1020, and swapped X03 with one from an FT-726.
I have changed all electrolytic capacitors around Q1019, and all ceramic chip capacitors, nothing of which makes a difference.

I also changed Q1019 in desperation, but again no difference!

Has anyone come across this problem before, and can make suggestions where to move the investigation to?

I have spent today repairing my HP141 spectrum analyser, so I will check out the local oscilator and 455Khz I.F. in more detail tomorrow to see if they are drifting around.

Thanks

Peter

593. Re: FT-290R with FM problem

Yahoo group: electrichandbag
Date: 2013-08-05 00:21:01 UTC
From: g0hzu
Topic: 592 Message: 593

I'd look to see if something is dragging down the base bias to the Q1020 transistor. It gets its bias via a 1M5 resistor so the ceramic filter CF01 could be pulling it down if it has gone leaky or there could be contamination on the PCB causing it or a leaky cap C106. Can you monitor the collector voltage at Q1020 to see if it gets biased off when the fault happens? i.e. the collector voltage will rise up to 6.8V if it loses bias.

Regards
Jeremy

--- In electrichandbag@yahoogroups.com, "peterwalker1999" <peter@...> wrote:
>
> I have a FT290R mk1, and it has a problem with FM recieve.
> FM TX is OK, and all SSB and CW are fine.
>
> The problem is intermittent sensitivity.
>
> When the radio is turned on it works fine, but after about 10 mins the FM audio starts to drop out erratically (either there or it is not there) getting wors and worse untill it is not there all the time.
>
> The CW and SSB recieve is OK during this, and the S meter deflection does not change. With the loss of audio the FM "hash" in the background is present, so it is not an audio problem, or a squelch problem. It just sounds like the recieved signal has deopped in signal strength.
>
> As CW and SSB are unaffected, this indicates a problem on the second IF and Q1019 the FM demodulator chip.
>
> The problem seems to be temperature related, so I have given the components around Q1019 a good blast with a freezer spray, but resulted in no change.
>
> Tapping the board, flexing the board, and wiggling components and wires has resulted in no change!
>
> I have changed Q1020, and swapped X03 with one from an FT-726.
> I have changed all electrolytic capacitors around Q1019, and all ceramic chip capacitors, nothing of which makes a difference.
>
> I also changed Q1019 in desperation, but again no difference!
>
> Has anyone come across this problem before, and can make suggestions where to move the investigation to?
>
> I have spent today repairing my HP141 spectrum analyser, so I will check out the local oscilator and 455Khz I.F. in more detail tomorrow to see if they are drifting around.

>
> Thanks
>
> Peter
>

594. Re: FT-290R with FM problem

Yahoo group: electrichandbag
Date: 2013-08-05 11:51:41 UTC
From: g3vvt@...
Topic: 592 Message: 594

Hi Peter,

Think that you are looking in the right area around Q1019. You do not say if you are using a signal generator for testing as checks with a stable signal generator can pay dividends, The FM RX chip the MC3357P seems reliable and does not normally give trouble with its use in a multitude of radios.

Check in particular that T13 and its resonating capacitor are not drifting as the device works as a co-incidence/quadrature detector and that is the resonating device. Should resonate at 455kHz which is checked when you are sure that all other items in the frequency conversion chain are correct and on frequency. Tune for maximum tone clarity and quieting with an on frequency signal.

Also check the 11.24MHz heterodyne xtal X03 is working OK though these are usually working or dead. The discrete FM IF normally used limiting and this in the past could be checked as a guide to the amount of IF signal present. Never had to go into this since the arrival of devices like the MC3357P and the various alternatives. Will study the device information sheets in my PC for clues if this helps.

OK on the HP 141T, a truly venerable beast. Originally were said to cost about $20,000 though were tough as old boots. Being rather heavy we used to carry them in transit cases between the seats in the centre of the GMC Suburban 4X4 trucks we had. Used them primarily to set up the deviation using the method of Bessel functions on our analogue microwave system. This was critical due to the effect it had on decoded multiplex channel levels. I bought a HP141T + 110MHz 8553B + 8552B IF in the in the 1990s in UK at a rally and later added the HP8554B 1250MHz module plus the HP8444A tracking generator. Had access to the HP service manuals at the time which helped in sorting out my acquisition.

Regards,
Bob, G3VVT

595. Re: FT-290R with FM problem

Yahoo group: electrichandbag
Date: 2013-08-05 19:20:03 UTC
From: peterwalker1999
Topic: 592 Message: 595

Bob and Jeremy

Thanks for the information and ideas where to look, I will try and get a look tonight.

I have been testing using an FM signal generator.

When working a -110dbm 3Khz modulated signal produces a fully quietened FM signal with the test tone clear.
However when not working correctly i need a -30dbm signal to get a fully quietened FM tone!

Peaking T13 works both when the FM is good and when it is bad, and it peaks at the same position.

I will certainly be checking the biasing of Q1020, as i have noticed the biasing everywhere is fluctuating between a good FM signal and a poor one, even pin 16 of Q1019 changes its biasing!

Thanks

peter
G0RSQ

596. Re: FT-290R with FM problem

Yahoo group: electrichandbag
Date: 2013-08-06 01:02:14 UTC
From: peterwalker1999
Topic: 592 Message: 596

Still no progress!

Checked bias on Q1020, and it is stable at about 2V on the collector.

Checked the 10.81 IF comming in on pin 16 of Q1019, and it looks OK, with no change between the two FM conditions. You can see the bandwidth, and the FM modulation, so The problem must be in the second IF.

Checked X03, and again rock steady, no fluctuation at either state of FM.

Checked the output of CF01, and now I get a good 455Khz signal when the FM works, and a scratchy signal when it isn't working!
Presumably the fault is before Q1020!

If I monitor pin 3 of Q1019, i can see a signal at about 10mhz, and I can erratically see the 455Khz signal. Looks like the problem is definatly to do with the 2nd IF.

I re-soldered CF01 using plenty of heat, and then the FM worked for about 1 Hour, before gradually dissapearing again, so i will try replacing CF01 with an equivelent part, an LT455EW, and see if this changes anything. After that i guess I will have to replace everything around Q1019 including resistors.

Peter

597. Re: [electrichandbag] Re: FT-290R with FM problem

Yahoo group: electrichandbag
Date: 2013-08-06 07:05:27 UTC
From: kkyahoo
Topic: 592 Message: 597

Peter,

Sounds like it may be the filter. Might be worth just bridging it with a small C. These ceramic filters don't really like dc on them, not sure if that is the case in this set. TS2000 owners know all about that fault!

Kevin

----- Original Message -----
From: peterwalker1999
To: electrichandbag@yahoogroups.com
Sent: Tuesday, August 06, 2013 2:02 AM
Subject: [electrichandbag] Re: FT-290R with FM problem

Still no progress!

Checked bias on Q1020, and it is stable at about 2V on the collector.

Checked the 10.81 IF comming in on pin 16 of Q1019, and it looks OK, with no change between the two FM conditions. You can see the bandwidth, and the FM modulation, so The problem must be in the second IF.

Checked X03, and again rock steady, no fluctuation at either state of FM.

Checked the output of CF01, and now I get a good 455Khz signal when the FM works, and a scratchy signal when it isn't working!
Presumably the fault is before Q1020!

If I monitor pin 3 of Q1019, i can see a signal at about 10mhz, and I can erratically see the 455Khz signal. Looks like the problem is definatly to do with the 2nd IF.

I re-soldered CF01 using plenty of heat, and then the FM worked for about 1 Hour, before gradually dissapearing again, so i will try replacing CF01 with an equivelent part, an LT455EW, and see if this changes anything. After that i guess I will have to replace everything around Q1019 including resistors.

Peter

598. Re: FT-290R with FM problem

Yahoo group: electrichandbag
Date: 2013-08-13 17:11:10 UTC
From: peterwalker1999
Topic: 592 Message: 598

Looks like the fault is with the T1013 transformer.

I replaced it with one from another 290R and all is well.

However I now need to find one to replace the faulty one!

Anyone got a scrap 290R they can let me have this transformer from, or sell for parts?

I have the specification for it, 1mH, 100pF and 100Kohm, but any leads as to where I can start looking for something suitable?

Thanks

peter

--- In electrichandbag@yahoogroups.com, "kkyahoo" <kkyahoo@...> wrote:
>
> Peter,
>
> Sounds like it may be the filter. Might be worth just bridging it with a small C. These ceramic filters don't really like dc on them, not sure if that is the case in this set. TS2000 owners know all about that fault!
>
> Kevin
>
>
> ----- Original Message -----
> From: peterwalker1999
> To: electrichandbag@yahoogroups.com
> Sent: Tuesday, August 06, 2013 2:02 AM
> Subject: [electrichandbag] Re: FT-290R with FM problem
>
>
>
>
> Still no progress!
>
> Checked bias on Q1020, and it is stable at about 2V on the collector.
>
> Checked the 10.81 IF comming in on pin 16 of Q1019, and it looks OK, with no change between the two FM conditions. You can see the bandwidth, and the FM modulation, so The problem must be in the second IF.
>
> Checked X03, and again rock steady, no fluctuation at either state of FM.
>
> Checked the output of CF01, and now I get a good 455Khz signal when the FM works, and a scratchy signal when it isn't working!
> Presumably the fault is before Q1020!

>
> If I monitor pin 3 of Q1019, i can see a signal at about 10mhz, and I can erratically see the 455Khz signal. Looks like the problem is definatly to do with the 2nd IF.
>
> I re-soldered CF01 using plenty of heat, and then the FM worked for about 1 Hour, before gradually dissapearing again, so i will try replacing CF01 with an equivelent part, an LT455EW, and see if this changes anything. After that i guess I will have to replace everything around Q1019 including resistors.
>
> Peter
>

599. Re: FT-290R with FM problem

Yahoo group: electrichandbag
Date: 2013-08-14 09:42:52 UTC
From: g3vvt@...
Topic: 592 Message: 599

Hi Peter,

In the event that the correct part is not available for T1013, the inductor/capacitor from a 455kHz IF should work using the full primary winding.

Going back a lot of years in the days of Pye Cambridges and the like with mostly only AM types on the surplus market, made up an FM detector for a number of radios from the TBA120S TV IF/detector sound chip which was available in most TV service workshops and modulated the 8MHz rocks with a BY127 rectifier to get sufficient deviation. The only item noted was the LC ratio was important for recovered audio and stability on the FM detector. The resistor is used to damp the tuned circuit to get better stability and bandwidth, though wound our own inductors for 455kHz detectors.

Otherwise I would try changing the resonating capacitor on the defective transformer as that must be a key suspect. Resonance could be checked at 455kHz with a GDO.

Regards,
Bob, G3VVT

600. Re: FT-290R with FM problem

Yahoo group: electrichandbag
Date: 2013-08-14 18:25:06 UTC
From: peterwalker1999
Topic: 592 Message: 600

Bob

Thanks for the information. I had not apreciated that the tunned circuit was set for resonance at 455Khz (should have done the maths) so that will open up the possibilities for replacement parts.

I think the problem is with the ferite slug, and think it has split, as adjusting the bad one makes little difference, but the good one makes a big difference. Tried to get the metal can off, but far too delicate, and i dont want to destroy the inductor, as i have got it to work much better by adding more capacitance to the existing internal one 68p plus a 15p trimmer, and this seems to get the FM pretty good.

Thanks again

peter

--- In electrichandbag@...m, g3vvt@... wrote:
>
> Hi Peter,
>
> In the event that the correct part is not available for T1013, the
> inductor/capacitor from a 455kHz IF should work using the full primary winding.
>
> Going back a lot of years in the days of Pye Cambridges and the like with
> mostly only AM types on the surplus market, made up an FM detector for a
> number of radios from the TBA120S TV IF/detector sound chip which was
> available in most TV service workshops and modulated the 8MHz rocks with a BY127
> rectifier to get sufficient deviation. The only item noted was the LC ratio
> was important for recovered audio and stability on the FM detector. The
> resistor is used to damp the tuned circuit to get better stability and
> bandwidth, though wound our own inductors for 455kHz detectors.
>
> Otherwise I would try changing the resonating capacitor on the defective
> transformer as that must be a key suspect. Resonance could be checked at
> 455kHz with a GDO.
>
> Regards,
> Bob, G3VVT
>

601. RE: Re: [electrichandbag] Re: FT 290 Mk1 RX problem

Yahoo group: electrichandbag
Date: 2013-10-27 21:47:37 UTC
From: <zl1ujg@...>
Topic: 565 Message: 601

Hi,
My FT290 Mk1 had the dreaded slow start up, which I recovered using the 47k trick.
Just recently I have noticed, no slow start up,...but works on TX.
I will see if it the meter working on Rx with my signal generator
I measured where I could with a Digital multimeter and the AGC volts appeared to bottom out around 0v. Minus 6.8v was present

The unit has been kept in the house with a ventilation system (which drives moisture out)...
I have been reading other info. The Ft290R11 has the fast time constant ceramic across the 1M5 time constant resistor, but the circuit is remarkably similar
Other units (FT726) have stated that ceramic capacitors have been a problem in the AGC circuit. I have personally replaced leaky ceramic capacitors in my day-job

The AGC DC amplifier works on a very low base current ~ 50nA, so any PCB leakage might be a problem.
One could mount the three base components in mid air.

It is possible that the ALC works as it is a lower impedance source. I have also seen leaky diodes of the same variety when changing the ALC circuit in my FT221R.

Away to measure whether the AGC/ S-meter works

Kevin
ZL1UJG

602. RE: RE: Re: [electrichandbag] Re: FT 290 Mk1 RX problem

Yahoo group: electrichandbag
Date: 2013-11-03 13:57:29 UTC
From: <damico@...>
Topic: 565 Message: 602

Hi Kevin,
keep us posted on this topic.
73,

Michele

---In electrichandbag@yahoogroups.com, <electrichandbag@yahoogroups.com> wrote:

Hi,
My FT290 Mk1 had the dreaded slow start up, which I recovered using the 47k trick.
Just recently I have noticed, no slow start up,...but works on TX.
I will see if it the meter working on Rx with my signal generator
I measured where I could with a Digital multimeter and the AGC volts appeared to bottom out around 0v. Minus 6.8v was present

The unit has been kept in the house with a ventilation system (which drives moisture out).
..
I have been reading other info. The Ft290R11 has the fast time constant ceramic across the 1M5 time constant resistor, but the circuit is remarkably similar
Other units (FT726) have stated that ceramic capacitors have been a problem in the AGC circuit. I have personally replaced leaky ceramic capacitors in my day-job

The AGC DC amplifier works on a very low base current ~ 50nA, so any PCB leakage might be a problem.
One could mount the three base components in mid air.

It is possible that the ALC works as it is a lower impedance source. I have also seen leaky diodes of the same variety when changing the ALC circuit in my FT221R.

Away to measure whether the AGC/ S-meter works

Kevin
ZL1UJG

603. Season Greetings

Yahoo group: electrichandbag
Date: 2013-12-24 07:56:20 UTC
From: Panagiotis Perreas
Topic: 603 Message: 603

Hi all!
I wish you a Merry Christmas and a Happy, Healthy and Prosperous NEW YEAR(radiowise and otherwise!)!!!
73

Panos - SV3AUW/ M0LPT

604. RE: [electrichandbag] Season Greetings

Yahoo group: electrichandbag
Date: 2013-12-24 09:28:06 UTC
From: Fabre
Topic: 603 Message: 604
Attachments: 2 described; binary payloads are missing from this source WARC

In return, I wish you a Merry Christmas and a Happy NEW YEAR !

Christian

De : electrichandbag@yahoogroups.com [mailto:electrichandbag@yahoogroups.com] De la part de Panagiotis Perreas
Envoyé : mardi 24 décembre 2013 08:56
À : GQRP@yahoogroups.com; BITX20@yahoogroups.com; Amateur-repairs@yahoogroups.com; G6LBQ@...; electrichandbag@yahoogroups.com; TS-520_820_530_830@yahoogroups.com; mkars80@...
Objet : [electrichandbag] Season Greetings

Hi all!

I wish you a Merry Christmas and a Happy, Healthy and Prosperous NEW YEAR(radiowise and otherwise!)!!!

73

Panos - SV3AUW / M0LPT

605. RE: [electrichandbag] Season Greetings

Yahoo group: electrichandbag
Date: 2013-12-24 10:20:02 UTC
From: Jeremy Smith
Topic: 603 Message: 605

Hi,

Merry Xmas and Happy New Year to all !

Jeremy
M0XVF

On Tue, Dec 24, 2013 01:28 PST Fabre wrote:

>In return, I wish you a Merry Christmas and a Happy NEW YEAR !
>
>
>
>Christian
>
>
>
>De : electrichandbag@yahoogroups.com [mailto:electrichandbag@yahoogroups.com] De la part de Panagiotis Perreas
>Envoyé : mardi 24 décembre 2013 08:56
>À : GQRP@yahoogroups.com; BITX20@yahoogroups.com; Amateur-repairs@yahoogroups.com; G6LBQ@...; electrichandbag@yahoogroups.com; TS-520_820_530_830@yahoogroups.com; mkars80@...
>Objet : [electrichandbag] Season Greetings
>
>
>
>
>Hi all!
>
>I wish you a Merry Christmas and a Happy, Healthy and Prosperous NEW YEAR(radiowise and otherwise!)!!!
>
>73
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>
>Panos - SV3AUW / M0LPT
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606. Merry Christmas and new years greetings

Yahoo group: electrichandbag
Date: 2013-12-25 11:12:47 UTC
From: Paul Crichton
Topic: 606 Message: 606

To one and all my family and l wish you all a awesome Christmas and Health Wealth and Prosperity in 2014 from M0RPC Paul aka M1BPT and G3ERE and Stuart M3UTJ Manchester UK

607. FT290mk1 Service Manual ?

Yahoo group: electrichandbag
Date: 2014-01-21 12:11:54 UTC
From: <pencoys@...>
Topic: 607 Message: 607

Has anyone got a service manual for the 290Mk1 or even a sensible parts location diagram. With poor eyesight and no good info I'm finding the repair of my handbag a little challenging.
My known faults are... no audio, probably dead o/p IC, and CPU crashing after a few operations of any function controlled by it. Turning rig off and back on again usually either does the same again or nothing. Display is being written to until crash.
any ideas welcome.
thanks es 73 Mike G8NXD

608. RE: FT290mk1 Service Manual ?

Yahoo group: electrichandbag
Date: 2014-01-21 16:33:27 UTC
From: <special@...>
Topic: 607 Message: 608

Hi Mike.
Sadly even the original FT290 diagram is poor(ish) quality. It might be worth looking at Mods.dk and seeing what their downloadable copy is like.
The audio problem maybe the IC although I found them pretty good with most audio problems being electrolytics failing in the audio amp circuitry.
Sadly I can’t help with the CPU crash as I have never come across that one in many years of playing with the 290/690/790 series of rigs

Slim G4IPZ

Apologies if this goes through the system twice as it didn't seem to go anywhere first time

609. Re: [electrichandbag] FT290mk1 Service Manual ?

Yahoo group: electrichandbag
Date: 2014-01-21 12:29:10 UTC
From: <special@...>
Topic: 607 Message: 609

Hi Mike.
Sadly even the original FT290 diagram is poor(ish) quality. It might be worth looking at Mods.dk and seeing what their downloadable copy is like.
The audio problem maybe the IC although I found them pretty good with most audio problems being electrolytics failing in the audio amp circuitry.
Sadly I can’t help with the CPU crash as I have never come across that one in many years of playing with the 290/690/790 series of rigs

Slim G4IPZ

From: pencoys@...
Sent: Tuesday, January 21, 2014 12:11 PM
To: electrichandbag@yahoogroups.com
Subject: [electrichandbag] FT290mk1 Service Manual ?

Has anyone got a service manual for the 290Mk1 or even a sensible parts location diagram.
With poor eyesight and no good info I'm finding the repair of my handbag a little challenging.
My known faults are... no audio, probably dead o/p IC, and CPU crashing after a few operations of any function controlled by it. Turning rig off and back on again usually either does the same again or nothing. Display is being written to until crash.
any ideas welcome.
thanks es 73 Mike G8NXD

This email is free from viruses and malware because avast! Antivirus protection is active.

This email is free from viruses and malware because avast! Antivirus protection is active.
http://www.avast.com

610. Re: [electrichandbag] FT290mk1 Service Manual ?

Yahoo group: electrichandbag
Date: 2014-01-21 22:51:04 UTC
From: Paul Taylor
Topic: 607 Message: 610

Hi. CPU crashing is probably due to corrosion / poor contacts on switch S01 (battery backup on/ off). If in off position, should be holding pins 26&27 of CPU to GND via 1k resistor.
Hope this helps
73

Paul

On 21 Jan 2014, at 12:29, <special@...> wrote:

> Hi Mike.
> Sadly even the original FT290 diagram is poor(ish) quality. It might be worth looking at Mods.dk and seeing what their downloadable copy is like.
> The audio problem maybe the IC although I found them pretty good with most audio problems being electrolytics failing in the audio amp circuitry.
> Sadly I can’t help with the CPU crash as I have never come across that one in many years of playing with the 290/690/790 series of rigs
>
> Slim G4IPZ
>
> From: pencoys@...
> Sent: Tuesday, January 21, 2014 12:11 PM
> To: electrichandbag@yahoogroups.com
> Subject: [electrichandbag] FT290mk1 Service Manual ?
>
>
> Has anyone got a service manual for the 290Mk1 or even a sensible parts location diagram. With poor eyesight and no good info I'm finding the repair of my handbag a little challenging.
> My known faults are... no audio, probably dead o/p IC, and CPU crashing after a few operations of any function controlled by it. Turning rig off and back on again usually either does the same again or nothing. Display is being written to until crash.
> any ideas welcome.
> thanks es 73 Mike G8NXD
>
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>
> This email is free from viruses and malware because avast! Antivirus protection is active.
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> This email is free from viruses and malware because avast! Antivirus protection is

active.
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>

611. Re: [electrichandbag] FT290mk1 Service Manual ?

Yahoo group: electrichandbag
Date: 2014-01-21 23:06:03 UTC
From: Mansueto Grech
Topic: 607 Message: 611

Hi Mike,
Some time ago someone, sorry don't remember who, uploaded a quite good
copy of the layout and some other stuff too.
Found them for you. They are in the files section
https://groups.yahoo.com/neo/groups/electrichandbag/files/Component%20Layouts/

hope this is of some help
73's
Mans.9H1GB

ps If you have access to an A0 plotter you can enlarge the layout further
Good Luck

On 21 January 2014 13:11, <pencoys@...> wrote:

>
>
> Has anyone got a service manual for the 290Mk1 or even a sensible parts
> location diagram. With poor eyesight and no good info I'm finding the
> repair of my handbag a little challenging.
> My known faults are... no audio, probably dead o/p IC, and CPU crashing
> after a few operations of any function controlled by it. Turning rig off
> and back on again usually either does the same again or nothing. Display is
> being written to until crash.
> any ideas welcome.
> thanks es 73 Mike G8NXD
>
>

612. Re: 290 and modern data modes?

Yahoo group: electrichandbag
Date: 2014-02-02 21:02:08 UTC
From: zaktherabbit
Topic: 588 Message: 612

M0JSW -
Where is your QTH?

Im going to try and set up for WSPR over the next couple of weeks, and give it a go. If drift becomes an issue, i'll look at means of providing further cooling.

Martin

--- In electrichandbag@yahoogroups.com, "m0jsw" <jes.woodland@...> wrote:
>
>
>
> --- In electrichandbag@yahoogroups.com, "zaktherabbit" <barfield673@> wrote:
> >
> > Im wondering if anyone is using their FT-290 to run modern QRP/weak signal data modes, such as WSPR/JT-65?
> >
> > If so, how are you finding its performance? In particular, are you finding it frequency stable enough?
> >
> First of all,as this is my first post,Hi to all the group and thanks for letting me join.
> I am just in the process of setting up my first serious attempt at working vhf and one of the thing I am very keen on is using the data modes.I`ll be very happy to share my results and will be very keen to hear the results of others,in particular our european members.....Jes m0jsw
>

613. Getting power into a 290R MKII

Yahoo group: electrichandbag
Date: 2014-02-15 12:13:07 UTC
From: <peter@...>
Topic: 613 Message: 613

Hi
I just purchased a pair of FT290R MKII at a very good price, as they had no accessories, including no battery pack.
As I never intend to use them portable I though this was not a problem, however I can soo no (normal) way of feeding them with 13V DC without either a battery pack or the clip on linear.
Am I missing something?

Of course I can just solder on a couple of wires to the battery terminals, and tape over all the exposed terminals, but is there a better way of connecting them up?

Peter
G0RSQ

614. Re: [electrichandbag] Getting power into a 290R MKII

Yahoo group: electrichandbag
Date: 2014-02-16 15:23:06 UTC
From: mdewynter@...
Topic: 613 Message: 614

There is A DC Socket on The Left hand side of The Case next to The charge socket marked EXT.

On Saturday, 15 February 2014, 12:13, "peter@....uk" <peter@...> wrote:

Hi
I just purchased a pair of FT290R MKII at a very good price, as they had no accessories, including no battery pack.
As I never intend to use them portable I though this was not a problem, however I can soo no (normal) way of feeding them with 13V DC without either a battery pack or the clip on linear.
Am I missing something?

Of course I can just solder on a couple of wires to the battery terminals, and tape over all the exposed terminals, but is there a better way of connecting them up?

Peter
G0RSQ

615. Re: [electrichandbag] Getting power into a 290R MKII

Yahoo group: electrichandbag
Date: 2014-02-16 17:16:55 UTC
From: Geoff Blake
Topic: 613 Message: 615

Hi,

The Charging and power sockets you mention are part of the battery carrier.
The clip-on PA has a pair of power leads. I don't think that there is any
alternative to soldering to the battery carrier contacts.

Some years back I bought a replacement battery carrier from Yaesu, it was
allegedly the last in the UK and no more will be imported...

Geoff

##
Geoff Blake, G8GNZ JO01fq: Chelmsford, Essex, UK
<geoff@...> or <melecerties@...>
Using Linux: Ubuntu 11.04 on Intel or Debian on UltraSparc
and Apple OS X 10.8.2 Mountain Lion on my Macbook Pro.
Avoiding Micro$oft like the plague.
##

On 16 February 2014 15:23, <mdewynter@...> wrote:

>
>
> There is A DC Socket on The Left hand side of The Case next to The charge
> socket marked EXT.
>
>
> On Saturday, 15 February 2014, 12:13, "peter@..." <
> peter@...> wrote:
>
> Hi
> I just purchased a pair of FT290R MKII at a very good price, as they had
> no accessories, including no battery pack.
> As I never intend to use them portable I though this was not a problem,
> however I can soo no (normal) way of feeding them with 13V DC without
> either a battery pack or the clip on linear.
> Am I missing something?
>
> Of course I can just solder on a couple of wires to the battery terminals,
> and tape over all the exposed terminals, but is there a better way of
> connecting them up?
>
> Peter
> G0RSQ
>
>

>
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>

616. Re: [electrichandbag] Getting power into a 290R MKII

Yahoo group: electrichandbag
Date: 2014-02-16 17:53:02 UTC
From: Pencoys
Topic: 613 Message: 616

I have both the 290 and 790.
they both have a 5.5mm dia power socket with a 2.1mm inner (aka 2.1mm barrel) for external power with or without the battery. don't run it at anything greater than 13v8 though.
the outer, barrel, is -ve and the inner 2.1mm pin is +ve.
this is located between the cover lock slider and the 2.5mm charge socket.
hth

617. Re: [electrichandbag] Getting power into a 290R MKII

Yahoo group: electrichandbag
Date: 2014-02-16 20:11:51 UTC
From: mdewynter@...
Topic: 613 Message: 617

Yes on Inspection I have discovered that You are correct,Coincidentally I have An FL-2025 Linear for The 290R Mk11 for sale on Ham Radio Deals £44-99 plus £12-95 Postage.

On Sunday, 16 February 2014, 17:16, Geoff Blake <geoff@...> wrote:

Hi,

The Charging and power sockets you mention are part of the battery carrier. The clip-on PA has a pair of power leads. I don't think that there is any alternative to soldering to the battery carrier contacts.

Some years back I bought a replacement battery carrier from Yaesu, it was allegedly the last in the UK and no more will be imported...

Geoff

##
Geoff Blake, G8GNZ JO01fq: Chelmsford, Essex, UK
<geoff@...> or <melecerties@...>
Using Linux: Ubuntu 11.04 on Intel or Debian on UltraSparc
and Apple OS X 10.8.2 Mountain Lion on my Macbook Pro.
Avoiding Micro$oft like the plague.
##

On 16 February 2014 15:23, <mdewynter@...> wrote:

>
>
>There is A DC Socket on The Left hand side of The Case next to The charge socket marked EXT.
>
>
>
>On Saturday, 15 February 2014, 12:13, "peter@..." <peter@...> wrote:
>
>
>Hi
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>
>Of course I can just solder on a couple of wires to the battery terminals, and tape over all the exposed terminals, but is there a better way of connecting them up?
>

>Peter
>G0RSQ
>
>
>
>

618. RE: Getting power into a 290R MKII

Yahoo group: electrichandbag
Date: 2014-02-21 17:26:04 UTC
From: <mdewynter@...>
Topic: 613 Message: 618

Peter is buying My FL-2025 Linear.So This problem is solved.

619. New member

Yahoo group: electrichandbag
Date: 2014-03-15 15:59:35 UTC
From: <mikem6ymn@...>
Topic: 619 Message: 619

Hi every one, I recently got myself an Sommerkamp FT290R (Yaesu)
And all I had to do was change the bulb in the front panel to a LED. It works very well indeed and has still got the original antenna attached to it.
I was rather surprised at how 2.5 watts can go so further out, more than I expected, right now I am using a roll up slimjim antenna from eBay, hanging from the ceiling with pretty good results.
I was told by some one who at one time had a Yaesu FT290R that the final power transisitor could be changed from the 2.5 watt to a 5 watt but did not go any further on that.

So right now I am looking for a 10 watt linear amp or maybe to even change the final output from the 2.5 watt to a 5 watt or even 10 watt.
I have no need to take it out any where as it is in my room on a permanent basis.

I hope to share any information to other fellow users on this little nice radio.

Mike M6YMN.

620. Re: New member

Yahoo group: electrichandbag
Date: 2014-03-17 10:13:50 UTC
From: <damico@...>
Topic: 619 Message: 620

Welcome on board Mike (and hello group) !
Changing the burned-out light bulb in my FT290R with an LED has always been on my mind, but I never did it since I never was able to source suitable LEDs; I have seen a couple of mods that suggest getting LEDs from discarded cellphones, but I have no access to them; so I wonder if someone can suggest an alternative source for suitable LEDs, and in particular part/numbers, etc. Any experience will be useful.
Thanks and 73,
Michele

621. Re: New member

Yahoo group: electrichandbag
Date: 2014-03-17 16:01:48 UTC
From: <mikem6ymn@...>
Topic: 619 Message: 621

Hi,
Here is a link to the ones I got from eBay they work very well indeed and have the internal resistor inline.

http://www.ebay.co.uk/itm/Qty-5-Bright-Red-LEDs-Lights-Pre-Wired-12-Volt-Lamps-5mm-Diameter-Clear-Lens-/120843376175?pt=UK_BOI_Electrical_Components_Supplies_ET&hash=item1c22d3962f
http://www.ebay.co.uk/itm/Qty-5-Bright-Red-LEDs-Lights-Pre-Wired-12-Volt-Lamps-5mm-Diameter-Clear-Lens-/120843376175?pt=UK_BOI_Electrical_Components_Supplies_ET&hash=item1c22d3962f

Its a bit fiddly but well worth it,
Good luck,

Mike M6YMN

622. Re: New member

Yahoo group: electrichandbag
Date: 2014-03-18 10:27:37 UTC
From: <damico@...>
Topic: 619 Message: 622

Thanks !
Did you install red or white LEDs ?

Michele

623. Re: [electrichandbag] Re: New member

Yahoo group: electrichandbag
Date: 2014-03-18 13:48:27 UTC
From: Mike Lee
Topic: 619 Message: 623

I chose the white LED's

Mike.

624. FT690R broken - buttons not working / keeps scanning

Yahoo group: electrichandbag
Date: 2014-04-17 22:32:12 UTC
From: <m0icr@...>
Topic: 624 Message: 624

Hello all,

This is my first post here so please be gentle with me! I have an old Yaesu FT690R which is giving me problems.

The good news
---------- RX seems fine on all modes, tested with a friend locally and can hear him on all modes Main VFO knob works, VFO switch works. LCD works.
Cosmetically clean inside and out. No apparent battery leakage inside

The bad
------- None of the front panel push button appear to work, only the VFO A/B switch works
Memory does not work
The radio starts to scan upwards when the PTT is pressed. I have tried removing the microphone and just grounding the ptt line on the mic socket just to eliminate the microphone but I get the same problem. The scanning problem is making the radio unusable. If I quickly re-key the Mic after first release it occasionally stops scanning.

Any help gratefully received. It's a lovely radio and I would really love to get it back on the air in time for the Sporadic E's!

Kind Regards
73 de Carl M0ICR, London, UK

625. Re: [electrichandbag] FT690R broken - buttons not working / keeps scanning

Yahoo group: electrichandbag
Date: 2014-04-18 15:10:33 UTC
From: Geoff Blake
Topic: 624 Message: 625

Hi Carl, Group,

I had problems with a stuck button on a Mk 2 which caused a similar
problem.

Geoff

##
Geoff Blake, G8GNZ JO01fq: Chelmsford, Essex, UK
<geoff@palaemon.co.uk> or <melecerties@...>
Using Linux: Ubuntu 11.04 on Intel or Debian on UltraSparc
and Apple OS X 10.8.2 Mountain Lion on my Macbook Pro.
Avoiding Micro$oft like the plague.
##

On 17 April 2014 23:32, <m0icr@...> wrote:

>
>
> Hello all,
>
> This is my first post here so please be gentle with me! I have an old
> Yaesu FT690R which is giving me problems.
>
> The good news
> ---------------------
>
> - RX seems fine on all modes, tested with a friend locally and can
> hear him on all modes
> - Main VFO knob works, VFO switch works.
> - LCD works.
> - Cosmetically clean inside and out.
> - No apparent battery leakage inside
>
>
> The bad
> -------
>
> - None of the front panel push button appear to work, only the VFO A/B
> switch works
> - Memory does not work
> - The radio starts to scan upwards when the PTT is pressed. I have
> tried removing the microphone and just grounding the ptt line on the mic
> socket just to eliminate the microphone but I get the same problem.
>

> The scanning problem is making the radio unusable. If I quickly re-key
> the Mic after first release it occasionally stops scanning.
>
>
> Any help gratefully received. It's a lovely radio and I would really love
> to get it back on the air in time for the Sporadic E's!
>
>
> Kind Regards
>
> 73 de Carl M0ICR, London, UK
>
>
>
>

626. Re: electrichandbag

Yahoo group: electrichandbag
Date: 2014-04-17 23:04:29 UTC
From: <special@...>
Topic: 624 Message: 626

Unfortunately the push buttons on the 290, 690 and 790 can suffer some nasty problems.
The worst I have come across are if the rig has been used in a smokers household, the nicotine buildup on the tactile rubber contacts behind the buttons seems to destroy them. A strip down and a clean MAY help but it's not a certainty.
Another problem is that the push buttons can simply fall apart with age, as these rigs are getting seriously long in the tooth now sadly.
I suspect that the scanning problem can still be related to a dodgy key pad switch but I am as yet unable to give a definitive answer to that as I have a 290 which randomly goes into scan, with or without the microphone plugged in.and which has so far failed to respond to treatment.
It might be worth checking the scan mode switch inside the rig (beside the battery holder) seeing firstly what positions it's in and secondly giving it a clean with proper switch cleaner and NOT WD40 or similar.
The memory not working could be simply the back up battery having died of old age always assuming it is switched on of course.

Hope these might give you a starting point

Slim G4IPZ

627. Car Cradle for Sale

Yahoo group: electrichandbag
Date: 2014-05-07 10:17:49 UTC
From: <mike@...>
Topic: 627 Message: 627

Hi,

Having a shack clearout. I have a car cradle for the 290.
I thought I'd offer it here before eBay. I'm in the UK for
postage purposes.

cheers

Mike

628. Re: Car Cradle for Sale

Yahoo group: electrichandbag
Date: 2014-05-07 15:00:11 UTC
From: <mdewynter@...>
Topic: 627 Message: 628

Please state a price £.

629. Re: Car Cradle for Sale

Yahoo group: electrichandbag
Date: 2014-05-07 17:17:43 UTC
From: <mike@...>
Topic: 627 Message: 629

I'll take anything reasonable or even unreasonable plus postage, as I just don't like throwing things out that someone
might want.

Mike

630. For disposal

Yahoo group: electrichandbag
Date: 2014-05-28 22:37:19 UTC
From: nicholas pascoe
Topic: 630 Message: 630

Hi all,
I have an FT-290 mk1 doing nothing, it works OK but the 'step' switch on front panel does not work and has been replaced with a push switch on side that does the same thing.
Also an Alinco DJ-560 dual band handy (missing the battery and antenna). It works fine with external antenna and power attached (power lead supplied).
Photos can been seen on www.g3ioi.co.uk
How about £60 + £5 post for both (UK only)
Ray G3IOI tele - 01268733035 or rayg3ioi@...

631. FT-290 mk1 LCD Display

Yahoo group: electrichandbag
Date: 2014-06-18 12:29:53 UTC
From: ianglamb@...
Topic: 631 Message: 631

The LCD display in my FT-290 mk1 has gone kaput, does anyone please know where I could obtain a replacement or is there a retrofit / mod to fit an alternative?

632. Re: [electrichandbag] FT-290 mk1 LCD Display

Yahoo group: electrichandbag
Date: 2014-06-18 12:54:18 UTC
From: Alexandre Veiga
Topic: 631 Message: 632

Hi,

I have the same problem with my FT-690.

73, Alex PY4EU

>_____
> De: "ianglamb@... [electrichandbag]" <electrichandbag@yahoogroups.com>
>Para: electrichandbag@...m
>Enviadas: Quarta-feira, 18 de Junho de 2014 9:29
>Assunto: [electrichandbag] FT-290 mk1 LCD Display
>
>
>
>
>
>
>
>The LCD display in my FT-290 mk1 has gone kaput, does anyone please know where I could obtain a replacement or is there a retrofit / mod to fit an alternative?
>
>
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>
>

633. Re: [electrichandbag] FT-290 mk1 LCD Display

Yahoo group: electrichandbag
Date: 2014-06-18 13:04:19 UTC
From: special@...
Topic: 631 Message: 633

The chances of finding a spare WORKING display for the MK1 290/690/790 rigs is virtually zero.
When they do crop up on Ebay they're silly prices and also without any guarantee.
I have never seen any form of non-yaesu replacement because the LCD was custom made and the chip in the display multiplexer was also manufactured purely for Yaesu.
If you are sure the display is faulty (Cracked, black, etc) then sadly it's probably finished unless you can find another for spares. However the most common fault was with the display which is why I have 2 FT290s and 1 FT690 with no displays as they had failed.
HOWEVER........
one other fault occurs when the pcb that the display contacts onto bends slightly and no longer connects to the LCD 'on-glass' connector..
That can sometimes be cured by adding a thin sheet of paper/plastic etc behind the other side of the PCB to press the board firmer onto the display.
The simplest way to check is to press on the display while the rig is powered up and see if a blank screen starts to display the normal onscreen info. If it does then your PCB has bowed slightly and the pressure trick might work.

Slim G4IPZ

634. Re: [electrichandbag] FT-290 mk1 LCD Display

Yahoo group: electrichandbag
Date: 2014-06-21 01:00:58 UTC
From: Hector Pascal
Topic: 631 Message: 634

*I've always understood that the displays themselves rarely "fail".
Failure of the associated electronics, cracking the glass and other
mechanical damage are the most likely "real" failure modes.*

*There have been many reports that blank LCD displays can often be repaired
by dismantling them, and very carefully cleaning the glass/conductive
rubber contact points.*

*Can anyone who has actually and personally done this **on
these transceivers**, provide a quick explanation of how to do it without
damage? *

David, VK6JT

On Wed, Jun 18, 2014 at 9:04 PM, special@... [electrichandbag] <
electrichandbag@yahoogroups.com> wrote:

>
>
> The chances of finding a spare WORKING display for the MK1 290/690/790
> rigs is virtually zero.
> When they do crop up on Ebay they're silly prices and also without any
> guarantee.
> I have never seen any form of non-yaesu replacement because the LCD was
> custom made and the chip in the display multiplexer was also manufactured
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> If you are sure the display is faulty (Cracked, black, etc) then sadly
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> most common fault was with the display which is why I have 2 FT290s and 1
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> HOWEVER........
> one other fault occurs when the pcb that the display contacts onto bends
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> powered up and see if a blank screen starts to display the normal onscreen
> info. If it does then your PCB has bowed slightly and the pressure trick
> might work.
>
> Slim G4IPZ
>
>

635. Mk1 Synthesizer step jump

Yahoo group: electrichandbag
Date: 2014-07-09 09:17:34 UTC
From: gi0gdp@...
Topic: 635 Message: 635

Has anyone seen this in an 30 year old 290 MK1, whilst tuning say from 144.290 to 144.297 all is OK
step wise and then suddenly it jumps either 2 or 3 KHz to say 144.300 thenis OK til about 144.350 and then
does it again. I havent had the time to note the exact multiples that it happens on as that can be done later
Needles to say a station on ssb at just under the calling frequency is almost impossible to resolve
another interesting 290 problem.....
regards
Geoff

636. Re: [electrichandbag] Mk1 Synthesizer step jump

Yahoo group: electrichandbag
Date: 2014-07-09 10:28:53 UTC
From: Hector Pascal
Topic: 635 Message: 636

Geoff,

FWIW, I had a similar problem on my MK 1 790 about 20 years ago.
The cause was a "stuck" output digit on the CPU's built in digital to analog converter, that controls the analog frequency. This caused the steps to mis-count up and down, best "heard" by tuning a CW carrier on SSB, and listening to the audio change as you rotate the dial. The mis-stepping is then apparent from the changes in audio tone.

Hopefully this is not the case with yours, because I had to replace the CPU. Not a soldering task for the inexperienced, even assuming you can still get the ic nowadays. (But the whole board may well still be available.)

David, VK6JT

On Wed, Jul 9, 2014 at 5:17 PM, gi0gdp@... [electrichandbag] <electrichandbag@yahoogroups.com> wrote:

>
>
> Has anyone seen this in an 30 year old 290 MK1, whilst tuning say from
> 144.290 to 144.297 all is OK
> step wise and then suddenly it jumps either 2 or 3 KHz to say 144.300
> thenis OK til about 144.350 and then
> does it again. I havent had the time to note the exact multiples that it
> happens on as that can be done later
> Needles to say a station on ssb at just under the calling frequency is
> almost impossible to resolve
> another interesting 290 problem.....
> regards
> Geoff
>
>
>
>
>

637. Re: [electrichandbag] FT-290 mk1 LCD Display

Yahoo group: electrichandbag
Date: 2014-06-21 07:06:40 UTC
From: special@...
Topic: 631 Message: 637

Hi David.

My comments were borne from long experience repairing many 290/690/790 mark 1 models whilst still a repair engineer about 20 years ago and the odd one or two since then.

Stripping down and attempting to clean the display contacts is NOT a job I would recommend for those who do not possess a fair degree of technical and electronics skill and ability. The internal wiring of these rigs does not like too much manipulation and the resultant wire joint breakages were a pain.

The mere dis-assembly of these rigs is fraught with potential problems. For those who wish to try it the info can be sourced (or at least could) by Googling for the info or going to Mods.dk and downloading the assorted info there.

Whilst the fading display problem may be due to poor conductive rubber contacts to the glass of the display, over-vigorous cleaning of the contacts on the LCD will ruin it anyway. Most problems I found that were contact based were as I mentioned before: a slight bowing of the display PCB resulting in poor contact pressure. I said how that could be tried and dealt with previously.

Also NEVER try using WD40 to clean the display/PCB contacts. It penetrates into the poor quality SRPB board that Yaesu used and can leave a resistive connection between the contacts making matters worse rather than better.

Despite what you may have heard David, the early LCDs did indeed fail quite commonly. They either went totally black or would fail to darken at all when the display data was fed to them. As I understood it, this was due to bonding failure between the two component parts of the glass sandwich that made up the display, a problem generally inherent in early LCD technology. The problems caused by bad connections only tended to occur on very old rigs as everything simply aged.

The multiplexing IC use to drive the display was a special (Matsushita) device and finding information on them proved almost impossible. Even when I did, it proved to be of no help as the display multiplexing was not straight forward and was dependent on the data chain from the main rig control CPU IC and a clock generated on it too.

I have latterly been aware of some people experimenting with PIC based replacements but as it was impossible to squeeze a replacement display into the existing 'hole', as I understand it their experimentation stopped.

I played around with developing an external display based on an Arduino mini with a 2 line LCD display but again, due to the add-on nature of the possible repair looking like an awful bodge of an extra box on the top of the case, I decided to stop.

73

Slim G4IPZ

638. Re: [electrichandbag] Mk1 Synthesizer step jump

Yahoo group: electrichandbag
Date: 2014-07-09 11:50:25 UTC
From: special@...
Topic: 635 Message: 638

Hi David.

Thanks for posting that one as I've not come across that - yet!
I suspect as these great, old rigs start to age even more, the even weirder faults will start appearing.
I've added it to my FT290 check list for future reference.

73 Dale (Slim) Haines G4IPZ

639. Re: Mk1 Synthesizer step jump

Yahoo group: electrichandbag
Date: 2014-07-09 09:41:34 UTC
From: special@...
Topic: 635 Message: 639

My immediate suspicion would fall on the rotary encoder perhaps being worn or simply dirty.

What happens if you tune using the up/down buttons on the microphone?

If the problem is still there using the buttons then that would eliminate the rotary encoder but open a whole new can of nasty worms pointing, probably within the digital circuitry.

If the problem isn't there with the buttons then perhaps a (long winded and tricky) strip down and clean of the encoder mechanism and innards may be looming.

You may find that simply squirting a small (SMALL!) amount of switch cleaner in through the hole where the click-stop ball bearing sits and then rotating the encoder several times may affect a cure. If not then it's back to a strip down.

A good, proper alcohol based switch cleaner is best but not one with old fashioned carbon-tetrachloride since that could possibly dissolve the plastic portions of the encoder

Don't whatever you do, use anything like WD40 or AC30 cleaners as they can spell death to encoders as they attract dust.

Slim G4IPZ

640. Re: [electrichandbag] FT-290 mk1 LCD Display

Yahoo group: electrichandbag
Date: 2014-07-09 15:59:46 UTC
From: Hector Pascal
Topic: 631 Message: 640

Many thanks for sharing your experience, Slim. My Mk1 290 and 690 are still limping along quite well, but the 290 has a tendency to intermittently stop working on receive when on USB. Dead silence - not even any hiss! Switching to LSB, and then back to USB usually brings it back. I have long suspected a low activity crystal may be the cause, but as soon as I poke around it all starts working again!. Is this a common, or even a known fault?

Regards,
David, VK6JT

On Sat, Jun 21, 2014 at 3:06 PM, special@ilizarov.org.uk [electrichandbag] <electrichandbag@yahoogroups.com> wrote:

>
>
> Hi David.
>
> My comments were borne from long experience repairing many 290/690/790
> mark 1 models whilst still a repair engineer about 20 years ago and the odd
> one or two since then.
>
> Stripping down and attempting to clean the display contacts is NOT a job I
> would recommend for those who do not possess a fair degree of technical and
> electronics skill and ability. The internal wiring of these rigs does not
> like too much manipulation and the resultant wire joint breakages were a
> pain.
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> The mere dis-assembly of these rigs is fraught with potential problems.
> For those who wish to try it the info can be sourced (or at least could) by
> Googling for the info or going to Mods.dk and downloading the assorted info
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> Whilst the fading display problem may be due to poor conductive rubber
> contacts to the glass of the display, over-vigorous cleaning of the
> contacts on the LCD will ruin it anyway. Most problems I found that were
> contact based were as I mentioned before: a slight bowing of the display
> PCB resulting in poor contact pressure. I said how that could be tried and
> dealt with previously.
>
> Also NEVER try using WD40 to clean the display/PCB contacts. It penetrates
> into the poor quality SRPB board that Yaesu used and can leave a resistive
> connection between the contacts making matters worse rather than better.
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> quite commonly. They either went totally black or would fail to darken at

> all when the display data was fed to them. As I understood it, this was due
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> that made up the display, a problem generally inherent in early LCD
> technology. The problems caused by bad connections only tended to occur on
> very old rigs as everything simply aged.
>
> The multiplexing IC use to drive the display was a special (Matsushita)
> device and finding information on them proved almost impossible. Even when
> I did, it proved to be of no help as the display multiplexing was not
> straight forward and was dependent on the data chain from the main rig
> control CPU IC and a clock generated on it too.
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> I have latterly been aware of some people experimenting with PIC based
> replacements but as it was impossible to squeeze a replacement display into
> the existing 'hole', as I understand it their experimentation stopped.
>
> I played around with developing an external display based on an Arduino
> mini with a 2 line LCD display but again, due to the add-on nature of the
> possible repair looking like an awful bodge of an extra box on the top of
> the case, I decided to stop.
>
> 73
>
> Slim G4IPZ
>
>

641. Re: [electrichandbag] Mk1 Synthesizer step jump

Yahoo group: electrichandbag
Date: 2014-07-10 15:49:05 UTC
From: gi0gdp@...
Topic: 635 Message: 641

Thanks for the reply David and Slim
Just tried the up down buttons with the same result
Sounds like a "stuck bit".
Will have a think about the way forward after some tea and biscuits!
thanks
Geoff

642. Re: [electrichandbag] Mk1 Synthesizer step jump

Yahoo group: electrichandbag
Date: 2014-07-10 16:54:07 UTC
From: Hector Pascal
Topic: 635 Message: 642

Geoff,

You can monitor the CPU bits with a DVM, but take care to avoid static voltages.

The DAC is a simple "resistor adding" type, and you can easily work out the conversion scheme. I seem to remember it is a simple 4 bit binary weighted type. I also seem to remember that some CPU inputs are quite vulnerable because the are easily accessed from the mike socket. Sorry to be a bit vague, but my problem did occur 25 years ago!

I would definitely try to rule out any other causes first, because the CPU is a Yaesu custom ic, and probably now rarer than hen's teeth!

David
VK6JT

On Thu, Jul 10, 2014 at 11:49 PM, gi0gdp@... [electrichandbag] <electrichandbag@yahoogroups.com> wrote:

>
>
> Thanks for the reply David and Slim
> Just tried the up down buttons with the same result
> Sounds like a "stuck bit".
> Will have a think about the way forward after some tea and biscuits!
> thanks
> Geoff
>
>

643. Re: [electrichandbag] FT-290 mk1 LCD Display

Yahoo group: electrichandbag
Date: 2014-07-09 16:41:30 UTC
From: special@...
Topic: 631 Message: 643

Hi again.

I have read of people apparently suffering with low activity and sluggish carrier oscillator crystals in the 290 but again it's not a fault I've come across.

I've also seen postings where people are looking to have a one-off crystal made but of course the costs are astronomic now.

As it happens I've just finished writing to Harry Leeming G3LLL to keep him posted on an odd fault on one of my 290s.

It started with the normal AGC fault needing the cure of an additional 47K resistor strapped between the base and emitter of Q1014.
Then a couple of years on, the fault recurred and strangely simply changing the 47K resistor once more cured it.
Yet again a year or so after that, once again I got the AGC problem. I checked the resistor and it was still 47K but remembering the previous time, I changed it once more. Lo and behold everything was back to normal and has been for the past 6 months.

I've mentioned a suggestion to Harry to get his views on it in light of his discovery some years back that occasionally simply spraying the PCB with switch cleaner cured the fault for a few weeks.

I am wondering if the rather nasty PCB material used in the 290/690/790 is absorbing a degree of moisture from the atmosphere and both using switch cleaner or, in my case, heating the board with the soldering iron, simply evaporates the miniscule amounts of water concerned.

Just a guess and I'll wait and see if the fault recurs before carrying out a few little experiments.

73

Dale (Slim) Haines

644. Re: [electrichandbag] FT-290 mk1 LCD Display

Yahoo group: electrichandbag
Date: 2014-07-10 09:31:02 UTC
From: Nick Tsakonas
Topic: 631 Message: 644

Hi,

although not answering directly to your question, as I have bought a lot of used rigs from ebay the last few years - including the whole FT-x90-R2 series which at the moment work fine.It is sometimes mandatory to unscrew your rig and inspect it with a magnifying glass for loose connections, broken solders, leaking capacitors, something that can be seen with naked eye. Most of the times, doing so early enough can prolong your rig life and maybe most of the issues are due to this kind of minor details.

due to their age, I expect failures in the solders or corrosion at some points or dried out capacitors so I always inspect them to see their status.Also, although not always possible, I read the schematics for critical parts and keep my eyes open on ebay in advance for parts or boards from other cannibalized rigs and buy them if possible for future repairs.I have a box with rare to find boards for my HF rigs, and some PLL chips for the FT-x90 series - just in case!

Maybe there is no LCD at the moment, but surely some day a spare will popup on ebay.Keep your eyes in there, put a saved search to get daily emails.I have used this method for the last couple of years and I have found almost all parts of my rigs passing by - of course I do not buy everything!

73,
Nick, SV1DJG

From: "Hector Pascal hector.pascal@... [electrichandbag]"
<electrichandbag@yahoogroups.com>
To: electrichandbag@yahoogroups.com
Sent: Wednesday, July 9, 2014 4:59 PM
Subject: Re: [electrichandbag] FT-290 mk1 LCD Display

Many thanks for sharing your experience, Slim. My Mk1 290 and 690 are still limping along quite well, but the 290 has a tendency to intermittently stop working on receive when on USB. Dead silence - not even any hiss! Switching to LSB, and then back to USB usually brings it back. I have long suspected a low activity crystal may be the cause, but as soon as I poke around it all starts working again!. Is this a common, or even a known fault?

Regards,
David, VK6JT

645. Re: [electrichandbag] Mk1 Synthesizer step jump

Yahoo group: electrichandbag
Date: 2014-07-10 15:55:52 UTC
From: special@...
Topic: 635 Message: 645

Thats not good news.
I suppose it may be worth going round the IC pins checking for dry joints holding a pin high or low.
I'm not near my workshop so I can't look at the diagram to make any better suggestions.

Slim

646. Re: [electrichandbag] FT-290 mk1 LCD Display

Yahoo group: electrichandbag
Date: 2014-07-11 00:16:06 UTC
From: Hector Pascal
Topic: 631 Message: 646

G'day Slim,

I have a note on my "to do" list to investigate my crystal fault, but it's a very long list, and the temporary fix is so easy!

That's a very interesting ALC fault, and to me sounds far more like a problem in Q1014? But with your experience I guess you eliminated that early on. Another thing that I would have looked for very hard is a leaky ceramic capacitor on the ALC line. But again, I bow to your own and Harry's experience. However, it's interesting to note that aerosol switch cleaner also has a chilling effect when it evaporates, so the fault may still turn out to be temperature related.

I'd be surprised if there would be enough board leakage to affect operation unless there are some very high impedances involved, but I will need to review the circuitry to be explore that possibility. Another question is why would this leakage effect only show up in this one area of the board. Next time the fault occurs, I think a hair drier on the ALC components is called for!

It will be fascinating to know the resolution of this. Please publish it here.

BTW, I don't recollect ever seeing details of this "normal ALC fault". Could you outline the effects to watch for?

Regards
David, VK6JT

On Thu, Jul 10, 2014 at 12:41 AM, special@....uk [electrichandbag] <electrichandbag@yahoogroups.com> wrote:

>
>
> Hi again.
>
> I have read of people apparently suffering with low activity and sluggish
> carrier oscillator crystals in the 290 but again it's not a fault I've come
> across.
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> I've also seen postings where people are looking to have a one-off crystal
> made but of course the costs are astronomic now.
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> As it happens I've just finished writing to Harry Leeming G3LLL to keep
> him posted on an odd fault on one of my 290s.
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> It started with the normal AGC fault needing the cure of an additional 47K

> resistor strapped between the base and emitter of Q1014.
> Then a couple of years on, the fault recurred and strangely simply
> changing the 47K resistor once more cured it.
> Yet again a year or so after that, once again I got the AGC problem. I
> checked the resistor and it was still 47K but remembering the previous
> time, I changed it once more. Lo and behold everything was back to normal
> and has been for the past 6 months.
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> I've mentioned a suggestion to Harry to get his views on it in light of
> his discovery some years back that occasionally simply spraying the PCB
> with switch cleaner cured the fault for a few weeks.
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> I am wondering if the rather nasty PCB material used in the 290/690/790 is
> absorbing a degree of moisture from the atmosphere and both using switch
> cleaner or, in my case, heating the board with the soldering iron, simply
> evaporates the miniscule amounts of water concerned.
>
> Just a guess and I'll wait and see if the fault recurs before carrying out
> a few little experiments.
>
> 73
>
> Dale (Slim) Haines
>
>

647. Re: [electrichandbag] FT-290 mk1 ALC Fault

Yahoo group: electrichandbag
Date: 2014-07-11 12:48:59 UTC
From: g4sra
Topic: 631 Message: 647

I have two FT-290 mk1's that exhibit this fault.

When the rig is first turned on the S-Meter end-stops, indicating a high AGC voltage. When keyed up, the S-Meter drops to zero and power output is in milliwatts, indicating a high ALC voltage.

If you experience *both* these conditions, it is not the Q1014 FET. The ALC voltage is derived before the FET, the resistor fix only treats the symptoms in this case and is not a proper cure.

The fault is temperature sensitive, any of a hot-air gun, soldering iron tip, or aerosol can spray (compressed air) change it's characteristics.

If the rig's are operated (left switched on) regularly for a reasonable length of time (hours) , the effects of the fault diminish, regardless of ambient temperature.

This feels to me to be most like an ageing electrolytic. This is a known issue with the FT290R MK1's

Due to the very high impedances involved, putting a scope probe anywhere near the issue changes it, this is truly a Quantum Physics problem (observing it changes the outcome).

Where I am going to look next...

Circuitry that is common to both AGC\ALC is the TX\RX delay switching section that ensures that the rig has truly 'switched' before allowing the rig to either listen or transmit. It does this by controlling the the AGC\ALC voltage. This I assume is there to stop one's own RF being blasted into one's own receiver front end whilst still active.

I will be investigating this section next when I get the time unless someone here posts the fix first (he types hopefully).

On 11/07/14 01:16, Hector Pascal hector.pascal@...
[electrichandbag] wrote:
> G'day Slim,
>
> I have a note on my "to do" list to investigate my crystal fault, but it's
> a very long list, and the temporary fix is so easy!
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> That's a very interesting ALC fault, and to me sounds far more like a
> problem in Q1014? But with your experience I guess you eliminated that
> early on. Another thing that I would have looked for very hard is a leaky
> ceramic capacitor on the ALC line. But again, I bow to your own and
> Harry's experience. However, it's interesting to note that aerosol switch

> cleaner also has a chilling effect when it evaporates, so the fault may
> still turn out to be temperature related.
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> why would this leakage effect only show up in this one area of the board.
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> here.
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> BTW, I don't recollect ever seeing details of this "normal ALC fault".
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> Regards
> David, VK6JT
>
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>> 73
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>> Dale (Slim) Haines
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>

648. Re: [electrichandbag] FT-290 mk1 LCD Display

Yahoo group: electrichandbag
Date: 2014-07-11 07:55:39 UTC
From: special@...
Topic: 631 Message: 648

Hi David.

It's strange that you've not come across the agc fault. Maybe it's the climate in VK land HI.

The problem is this.

On switch on the S meter slams hard against the right hand side or, in some cases floats to mid-scale and stays there. There is no sound on SSB and occasionally there might be a low level hiss on FM.

Simply leaving the rig running for a while (often as long as 30 minutes) will see the meter drift back to zero and the rig slowly start working normally which it will continue to do until the rig is turned off, even for the briefest moment, after which the restart period begins again on switch on.

(There is some previous info on the resistor mod in the group files entitled AGC FAULT MODS.)

Googling the fault will present quite a load of info on this fault.
The immediate suspect is always Q1014 however changing it (even with a correct 2SC2603E) will often make no difference or, even if it does, the fault may reappear within a few days (or weeks if you're lucky)

The circuit around Q1014 is quite odd in as far as the base of Q1014 simply 'floats' with no DC path to anywhere.

Suspicion also falls on D28, 29 & 30 but changing them may, again prove only temporary.

Harry was a Yaesu dealer back in the days of the 290's emergence and has stated that when he approached Yaesu abouth this problem, they had no cure but stated that if this 'bodge' worked then they were happy for it to be done!

The 'bodge' is quite simply a 47K resistor between the base of Q1014 and chassis and it works again. (see group files)

However.....
I have now come across just one FT290 (luckily one of my own) where this mod worked but after a year or so (seriously) the fault recurred.
Removing the 47K resistor and replacing it with another 47K resistor bizarrely cleared the fault but even stranger, about 2 years later it recurred once again.
The replacement of the 47K resistor once more cleared the fault and, at present the rig works perfectly again.

The joy of elderly rigs

Slim G4IPZ

649. Re: [electrichandbag] FT-290 mk1 LCD Display

Yahoo group: electrichandbag
Date: 2014-07-11 22:53:03 UTC
From: Hector Pascal
Topic: 631 Message: 649

Thanks for that, Slim.

"floating base"?? It must get it's bias from somewhere! I think all this sounds like something interesting to look into.
Yes, I know Harry's reputation well, (and yours also to some extent!) - I was G8LRE for many years, and G0KXR briefly, before moving to VK. Prior to that I was an Engineer with BBC Transmission in London for ~20 years.
My FTx90's were bought in the UK, so in retrospect, I too am surprised I've never seen this fault. (My fingers are now looking for something wooden to touch!)
.
Regards David,
VK6JT

On Fri, Jul 11, 2014 at 3:55 PM, special@ilizarov.org.uk [electrichandbag] <electrichandbag@yahoogroups.com> wrote:

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> Hi David.
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>
> Simply leaving the rig running for a while (often as long as 30 minutes)
> will see the meter drift back to zero and the rig slowly start working
> normally which it will continue to do until the rig is turned off, even for
> the briefest moment, after which the restart period begins again on switch
> on.
>
> (There is some previous info on the resistor mod in the group files
> entitled AGC FAULT MODS.)
>
> Googling the fault will present quite a load of info on this fault.
> The immediate suspect is always Q1014 however changing it (even with a
> correct 2SC2603E) will often make no difference or, even if it does, the
> fault may reappear within a few days (or weeks if you're lucky)
>
> The circuit around Q1014 is quite odd in as far as the base of Q1014
> simply 'floats' with no DC path to anywhere.

>
> Suspicion also falls on D28, 29 & 30 but changing them may, again prove
> only temporary.
>
> Harry was a Yaesu dealer back in the days of the 290's emergence and has
> stated that when he approached Yaesu abouth this problem, they had no cure
> but stated that if this 'bodge' worked then they were happy for it to be
> done!
>
> The 'bodge' is quite simply a 47K resistor between the base of Q1014 and
> chassis and it works again. (see group files)
>
> However.....
> I have now come across just one FT290 (luckily one of my own) where this
> mod worked but after a year or so (seriously) the fault recurred.
> Removing the 47K resistor and replacing it with another 47K resistor
> bizarrely cleared the fault but even stranger, about 2 years later it
> recurred once again.
> The replacement of the 47K resistor once more cleared the fault and, at
> present the rig works perfectly again.
>
> The joy of elderly rigs
>
> Slim G4IPZ
>
>

650. FT290 mk2 Mic Gain

Yahoo group: electrichandbag
Date: 2014-08-04 17:09:37 UTC
From: ianglamb@...
Topic: 650 Message: 650

Does anyone know which pot the SSB mic gain setting is on an FT290 mk2 please?

651. Re: FT290 mk2 Mic Gain

Yahoo group: electrichandbag
Date: 2014-08-05 11:08:43 UTC
From: g3vvt@...
Topic: 650 Message: 651

Hi Ian,

The FT290 mk2 SSB mic gain pot in the Technical Supplement TX alignment instructions appears to be VR3004 on the main unit. There will also be some interaction with the ALC pot in the setting which appears to be VR3007.

The FM deviation pot is VR3005 on the main unit.

Both the FT290 mk2 Instruction Book and the Technical Supplement are available for download from Mods DK if my memory is correct.

Regards,
Bob, G3VVT

652. FT290 Mk 11

Yahoo group: electrichandbag
Date: 2014-08-18 21:55:41 UTC
From: g4joeuk@...
Topic: 652 Message: 652

Hi, I am in need of the battery pack for the Mark 2 FT290.
Can anyone help?
Joe

653. mk1 290 poor rx audio on fm

Yahoo group: electrichandbag
Date: 2014-09-09 19:07:17 UTC
From: m3vuvm3vuv@...
Topic: 653 Message: 653

Hi all,thought i would share this cure i had for one of these with realy bad rx audio,itmay save someone some time.I had this mk1 290 given to me a few weeks ago with rx audio issues mainly on fm,it was all muffeled and distorted,ssb wasnt 100% but better by far than fm.I started by checking the esr on all the caps by the audio ic,most were reading over 10 ohms!,i replaced all of them and tried it againe,it was about 50% beter but still poorly!,my next job was to separate the 2 metal posts near mc3357p,i took the audio from the pin(basicaly pin 9 of the ic)into another amp,the audio from that was pretty clear,i forgot to add that if the volume on the rig was turned down realy low it wasnt half so bad!,i traced the audio path with the other amp suspecting q 1025 or 26 to be bad but they were fine,the audio was good right up to q1027 the audio ic,i had already checked the vcc to this and was seeing about 8v,i saw its fed via a 2.2ohm resistor,i downloaded the data sheet for the ic and its vcc was supposed to be 12v!,just out of interest i measured the vcc under load when the audio began to fall apart,it dropped to about 3v!,i suspected a bad audio amp,i thought well shit or bust and ran a feed from the 12v rail to pin 6 of the ic and bingo clear audio!,i decided to remove r 122 for a closer look,as soon as i touched it it fell apart!,must of been well cooked!,why they use a quater watt resistor on an amp that can put out 1 watt is beyond me!,i assume its going to be class ab amplification so what about 30-40% efficient,no wonder it was cooked,well i hope that can be of help to someone,next job is to reallign it and it should be good,ps,thanks for having me in the group,73 Paul m3vuv.

654. Re: mk1 290 poor rx audio on fm

Yahoo group: electrichandbag
Date: 2014-09-14 00:12:33 UTC
From: m3vuvm3vuv@...
Topic: 653 Message: 654

well thought id give an update on this 290 mk1,i trie doing a realignment but no joy at all,still terible audio and a few of the adjustments did nothing at all,once againe i started checking the capacitor esr readings,most were bad,so far ive changed 24 caps!,that at least got some of the adjustments on various trimmers etc actualy doing something but no matter what i did i couldnt get the audio anywhere near on ssb,the previous owner of the radio later told me ssb went south a few years ago and he just used it on fm untill that buggered up as well,he brought the radio new in 1985,anyway back to the repair.i was realy scratching my head with this thing,i was looking around it with the sig gen and scope and noticed the signal on the if was looking good until it got to xf 02 the 10.81 mhz filter,i decided to remove it and bridge the input and output to it so the signals go strait to d09,doing this actualy got decent ssb audio out of the rig,i expect the selectivity has dropped a tad tho lol,ive cut open the filter and its an 8 pole job using 4x 2 pole xtal filters,for anyone doing this it has only two capacitors inside between the center 2 xtal filters,ive only managed to get a measurment off of one of these,it was 47pf,ive managed to get rid of all the potting compound with carefull use of a blowtorch and screwdriver,i desoldered the cans off of all 4 xtals to have a look for any detached contacts or cracked quartz but they all look fine,im in the process of rebuilding it on a small piece of veroboard with new caps,fingers crossed it was a bad cap?i may take some pics and post,it will be realy nice to get this working as its one owner and cosmeticley its like new,its a shame it uses this if as ive a couple of dead kenwood 2m ssb radios and was planning to use the filters from one of those,hence the need to do this job,if i can get the ssb sorted its onto refiting q14 and trying to sort the common agc issues out,will keep you all posted 73 m3-vuv Paul.

655. Re: mk1 290 poor rx audio on fm

Yahoo group: electrichandbag
Date: 2014-09-14 01:04:37 UTC
From: m3vuvm3vuv@...
Topic: 653 Message: 655

oops,meant to say the filter contains 3 caps not 2 !

656. Re: mk1 290 poor rx audio on fm

Yahoo group: electrichandbag
Date: 2014-09-14 13:38:57 UTC
From: g3vvt@...
Topic: 653 Message: 656

Hi Paul,

The filter you mention XF1002 is in the SSB/CW path only.

Just why are you working on an SSB filter for FM audio if the posting of "mk1 290 poor rx audio on FM" is correct?

Is always as well to study the block diagram when this is available to find out the signal paths.
From the RX 10.8MHz IF the signal splits into two directions with FM passing through Q1019 an MC3357P IF/DET/SQ chip and SSB/CW passing through XF1002. They do not meet up again until you get to the audio stages.

In any servicing work you have to be systematic in approach. What is the effect and in a multimode radio what exactly is affected?

If in the audio stages an audio generator usually set at 1kHz together with an oscilloscope can check that part of the system out. An RF signal generator set at usually +/-1.5kHz FM deviation on a selected channel frequency can have beneficial effects in breaking down the cause of RX FM distortion in the RF/IF and discriminator/detector paths. Can be that the FM discriminator is misaligned. See page 38 of the user manual of how to check and correct this.

Another possibility is that the radio is off frequency which is a more common problem. Check that the radio is on frequency with an accurate counter or Communications Service monitor on a given frequency on TX. Check the details on page 44 for TX alignment, but usually a slight adjustment of L3007 in the VCO section can have beneficial results!

With the work done on the SSB filter this may be terminally damaged and may need a replacement from a scrap radio. You can check the RX IF response using such as a suitable noise generator and the Spectrogram program on your PC using the sound card as detailed on the Elecraft web site to check the filter. I used this when aligning my Elecraft K2 and have found it useful for other purposes. An alternative would be to use a spectrum analyzer and tracking generator into the filter with suitable impedance matching added to the filter or use a sweep generator with an oscilloscope + RF detector as another alternative. Most amateurs would not have access to this type of equipment so the Elecraft method can be somewhat easier.

All of the above can depend on what accurate test equipment you have access to as without that can become somewhat more difficult.

Regards,
Bob, G3VVT (Eng Tech, MIET)

657. Re: mk1 290 poor rx audio on fm

Yahoo group: electrichandbag
Date: 2014-09-14 13:57:51 UTC
From: m3vuvm3vuv@...
Topic: 653 Message: 657

Hi,thanks for the advice,im sure i mentioned it but the fm audio is sorted,im now trying to sort the audio out on ssb,its terrible on lsb and usb,as i said bypasing the filter cleans it up no end so im assuming thats where the issue is?,73 paul m3vuv

658. Re: mk1 290 poor rx audio on SSB

Yahoo group: electrichandbag
Date: 2014-09-15 10:19:43 UTC
From: g3vvt@...
Topic: 658 Message: 658

Hi Paul,

In that case yes, the filter XF1002 is one of the suspects as are the SSB carrier frequencies for LSB and USB. In addition it depends how you are monitoring the SSB signal.

What do you use as a monitor?

The details how to set up the carrier frequencies are there on page 44 in the user instruction manual. However, this does not enable you to see the effect of the SSB filter without other test equipment. As mentioned running the Spectrogram programme in your PC + sound card together with a suitable noise generator with the radio on RX can open up things so you can see what is wrong. I had to put an audio transformer in the PC sound card audio input to isolate the effects of the PC power supply, but other than that worked like a charm.

Check the information/feedback side on the Elecraft web site for more information: _www.elecraft.com_ (http://www.elecraft.com) (assuming the information is still there of course). Failing that one of the links from the Elecraft site should help.

Regards,
Bob, G3VVT

In a message dated 15/09/2014 09:41:09 GMT Daylight Time, Paul, M3VUV writes:

Hi,thanks for the advice,im sure i mentioned it but the fm audio is sorted,im now trying to sort the audio out on ssb,its terrible on lsb and usb,as i said bypasing the filter cleans it up no end so im assuming thats where the issue is?,73 paul m3vuv

659. Re: mk1 290 poor rx audio on SSB

Yahoo group: electrichandbag
Date: 2014-09-15 15:26:14 UTC
From: m3vuvm3vuv@...
Topic: 658 Message: 659

cheers bob,i will look into that,test gear wise i was using a scope sig gen and a 1.3ghz hitachi frequency counter,the only thing i havent been able to check very well is the first if alignment (t1005-t1006-t1014 as i dont have a sweep gen,ive just monitored another ssb transceivers transmision and peaked them for max sig on the scope and noise from the speaker,ive moved the cores all ways but it doesent make ant differance to the clarity of the audio only signal strenth,the only other thing i cant get on spec is the vcv line adjustment,the max i get is about 2.3 volts max,im not sure what vcv means,im asuming its some american term?,when the filter was in the board the audio was very sort of scratchy and sort of distorted,almost as if the speaker voice coil was fouling on the magnet,without the filter its about 90% better,i dont know how to test the 2 pole monolythic xtal filters,at least without a spectrum analyse and sweep gen,i dont know if its possible to build an oscillator as you would for a normal xtal and use the frequency counter to see what frequency there on,ie,use the center pin and then each outer pin,ive been trying to find info on the net but no joy as yet,ive got a hunch its a bad cap in the filter,or at least i hope its that,if not im running out of ideas,i had a hp spec analyser that i sold about 2yrs ago,wishing i kept it now!.73 Paul m3-vuv.

660. Re: [electrichandbag] Re: mk1 290 poor rx audio on SSB

Yahoo group: electrichandbag
Date: 2014-09-15 16:06:32 UTC
From: kkyahoo
Topic: 658 Message: 660

VCV usually means varactor control voltage. It's the synth tuning voltage for the vfo.

----- Original Message -----
From: m3vuvm3vuv@... [electrichandbag]
To: electrichandbag@yahoogroups.com
Sent: Monday, September 15, 2014 4:26 PM
Subject: [electrichandbag] Re: mk1 290 poor rx audio on SSB

cheers bob,i will look into that,test gear wise i was using a scope sig gen and a 1.3ghz hitachi frequency counter,the only thing i havent been able to check very well is the first if alignment (t1005-t1006-t1014 as i dont have a sweep gen,ive just monitored another ssb transceivers transmision and peaked them for max sig on the scope and noise from the speaker,ive moved the cores all ways but it doesent make ant differance to the clarity of the audio only signal strenth,the only other thing i cant get on spec is the vcv line adjustment,the max i get is about 2.3 volts max,im not sure what vcv means,im asuming its some american term?,when the filter was in the board the audio was very sort of scratchy and sort of distorted,almost as if the speaker voice coil was fouling on the magnet,without the filter its about 90% better,i dont know how to test the 2 pole monolythic xtal filters,at least without a spectrum analyse and sweep gen,i dont know if its possible to build an oscillator as you would for a normal xtal and use the frequency counter to see what frequency there on,ie,use the center pin and then each outer pin,ive been trying to find info on the net but no joy as yet,ive got a hunch its a bad cap in the filter,or at least i hope its that,if not im running out of ideas,i had a hp spec analyser that i sold about 2yrs ago,wishing i kept it now!.73 Paul m3-vuv.

661. Re: [electrichandbag] Re: mk1 290 poor rx audio on SSB

Yahoo group: electrichandbag
Date: 2014-09-17 15:45:23 UTC
From: m3vuvm3vuv@...
Topic: 658 Message: 661

well i got the filter rebuilt with new caps and realigned the rig and hey presto,ive now got decent audio on ssb!,ive now got to replace q14,or rather fit one,the only thing im struggling with is the pcb around where q 14 fits,when the transistor was removed some of the tracks lifted,theres a pin with a white with a mauve trace coming from it and i cant seem to make sense of the schematic for this,would anyone have a pic of the board around this area so i can repair the tracks?,ive looked on here but the pics stop just short of where i need,cheers Paul m3-vuv.

662. Radio dead after inverting power polarity

Yahoo group: electrichandbag
Date: 2014-09-28 18:54:54 UTC
From: ve2ebp@...
Topic: 662 Message: 662

Hi guys, I loved that radio! I can't believe I've been long enough a ham to know better but did the same mistake: no fuse!

I used a 'standard' wall wart of 12 VDC but back then, Yaesu wasn't following today's standards...
I'm sure I'm not the only one to whom it happened. Has anybody successfully repair their rig after doing the same mistake?

This is really sad.

Thanks in advance guys.

Pete, VE2HS

663. Service manual

Yahoo group: electrichandbag
Date: 2014-09-28 18:56:01 UTC
From: ve2ebp@...
Topic: 663 Message: 663

I noticed that the service manual is not in the files section nor can it be found on mods.dk.
Is there a way to still get a copy of it somewhere ?

664. Re: [electrichandbag] Service manual

Yahoo group: electrichandbag
Date: 2014-09-28 23:09:44 UTC
From: Hector Pascal
Topic: 663 Message: 664

To the best of my knowledge, there never was a Yaesu Service Manual for the Mark1. And I've never seen one for the Mark 2 either.

Anybody know different?

The circuit diagram, pcb layout, and some short-form alignment procedures are in the Operating Manuals, which are available on line.

Regards,

David
VK6JT

On Mon, Sep 29, 2014 at 2:56 AM, ve2ebp@... [electrichandbag] <electrichandbag@yahoogroups.com> wrote:

>
>
> I noticed that the service manual is not in the files section nor can it
> be found on mods.dk.
> Is there a way to still get a copy of it somewhere ?
>
>
>
>

665. Re: [electrichandbag] Service manual

Yahoo group: electrichandbag
Date: 2014-09-28 23:41:05 UTC
From: ve2ebp@...
Topic: 663 Message: 665

Thank you very much David

666. Re: [electrichandbag] Service manual

Yahoo group: electrichandbag
Date: 2014-09-29 04:42:02 UTC
From: Mansueto Grech
Topic: 663 Message: 666

Hi David,
A workshop manual does exist for the mk2 but the copy I came across was not complete and of bad quality. Should have a copy somewhere if interested. No service or workshop manual was ever issued as far as I know.
73's
Mans 9H1GB
On Sep 29, 2014 1:41 AM, "ve2ebp@... [electrichandbag]" <electrichandbag@yahoogroups.com> wrote:
>
>
>
> Thank you very much David
>
>

667. Re: [electrichandbag] Service manual

Yahoo group: electrichandbag
Date: 2014-09-29 06:28:22 UTC
From: kkyahoo
Topic: 663 Message: 667

There is a technical supplement for the mk2. Covers alignment, schematics etc. I have the pdf if that helps.

Kevin
----- Original Message -----
From: Mansueto Grech mansueto.grech@... [electrichandbag]
To: electrichandbag@yahoogroups.com
Sent: Monday, September 29, 2014 5:42 AM
Subject: Re: [electrichandbag] Service manual

Hi David,
A workshop manual does exist for the mk2 but the copy I came across was not complete and of bad quality. Should have a copy somewhere if interested. No service or workshop manual was ever issued as far as I know.
73's
Mans 9H1GB
On Sep 29, 2014 1:41 AM, "ve2ebp@... [electrichandbag]" <electrichandbag@yahoogroups.com> wrote:
>
>
>
> Thank you very much David
>
>

668. Re: [electrichandbag] Service manual

Yahoo group: electrichandbag
Date: 2014-09-29 06:44:31 UTC
From: Mansueto Grech
Topic: 663 Message: 668

Hi Kevin,
Can I have a copy as mine is not a good copy especially the layout and not the full document.
Thanks
Mans. 9h1GB

On 29 September 2014 08:28, 'kkyahoo' kkyahoo@... [electrichandbag] <electrichandbag@yahoogroups.com> wrote:

>
>
> □
> There is a technical supplement for the mk2. Covers alignment, schematics
> etc. I have the pdf if that helps.
>
> Kevin
>
> ----- Original Message -----
> *From:* Mansueto Grech mansueto.grech@... [electrichandbag]
> <mansueto.grech@...+[electrichandbag]>
> *To:* electrichandbag@yahoogroups.com
> *Sent:* Monday, September 29, 2014 5:42 AM
> *Subject:* Re: [electrichandbag] Service manual
>
>
>
> Hi David,
> A workshop manual does exist for the mk2 but the copy I came across was
> not complete and of bad quality. Should have a copy somewhere if
> interested. No service or workshop manual was ever issued as far as I know.
> 73's
> Mans 9H1GB
> On Sep 29, 2014 1:41 AM, "ve2ebp@... [electrichandbag]" <
> electrichandbag@yahoogroups.com> wrote:
> >
> >
> >
> > Thank you very much David
> >
> >
>
>
>

669. Re: [electrichandbag] Service manual

Yahoo group: electrichandbag
Date: 2014-09-29 09:54:15 UTC
From: Wayne - VK5APN
Topic: 663 Message: 669

Hi

Is this for the 790RMK11 or the 290RMK11

Looking for the 790RMK11 if anyone has one, also interested in the 290RKM11

Cheers and
Regards

Wayne

VK5APN

----- Original Message -----
From: electrichandbag@yahoogroups.com
To:
Cc:
Sent:Mon, 29 Sep 2014 08:44:31 +0200
Subject:Re: [electrichandbag] Service manual

Hi Kevin, Can I have a copy as mine is not a good copy especially the layout and not the full document. Thanks Mans. 9h1GB
On 29 September 2014 08:28, 'kkyahoo' kkyahoo@... [1] [electrichandbag] wrote:

☐ There is a technical supplement for the mk2. Covers alignment, schematics etc. I have the pdf if that helps. Kevin -----
ORIGINAL MESSAGE ----- FROM: Mansueto Grech mansueto.grech@... [electrichandbag] [3] TO: electrichandbag@yahoogroups.com [4]
SENT: Monday, September 29, 2014 5:42 AM SUBJECT: Re: [electrichandbag] Service manual

Hi David,
A workshop manual does exist for the mk2 but the copy I came across was not complete and of bad quality. Should have a copy somewhere if interested. No service or workshop manual was ever issued as far as I know.
73's
Mans 9H1GB
On Sep 29, 2014 1:41 AM, "ve2ebp@... [5] [electrichandbag]" wrote:
>
>
>
> Thank you very much David
>

>

Links:
------
[1] mailto:kkyahoo@freeuk.com
[2] mailto:electrichandbag@yahoogroups.com
[3] mailto:mansueto.grech@gmail.com+%5Belectrichandbag%5D
[4] mailto:electrichandbag@yahoogroups.com
[5] mailto:ve2ebp@...
[6] mailto:electrichandbag@yahoogroups.com
[7]
https://groups.yahoo.com/neo/groups/electrichandbag/conversations/messages/668;_ylc=X3oDMT
JwdWgzdGY3BF9TAzk3MzU5NzE0BGdycElkAzE5NzE4MDA5BGdycHNwSWQDMTcwNTA2MzEwOARtc2dJZAM2NjgEc2Vj
A2Z0cgRzbGsDcnBseQRzdGltZQMxNDExOTczMDcz?act=reply&messageNum=668
[8]
mailto:mansueto.grech@...?subject=Re%3A%20%5Belectrichandbag%5D%20Service%20manual
[9]
mailto:electrichandbag@yahoogroups.com?subject=Re%3A%20%5Belectrichandbag%5D%20Service%20m
anual
[10]
https://groups.yahoo.com/neo/groups/electrichandbag/conversations/newtopic;_ylc=X3oDMTJmbz
liZGxtBF9TAzk3MzU5NzE0BGdycElkAzE5NzE4MDA5BGdycHNwSWQDMTcwNTA2MzEwOARzZWMDZnRyBHNsawNudHBj
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[11]
https://groups.yahoo.com/neo/groups/electrichandbag/conversations/topics/663;_ylc=X3oDMTMz
bWY3Y2ZlBF9TAzk3MzU5NzE0BGdycElkAzE5NzE4MDA5BGdycHNwSWQDMTcwNTA2MzEwOARtc2dJZAM2NjgEc2VjA2
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[12]
https://groups.yahoo.com/neo/groups/electrichandbag/info;_ylc=X3oDMTJmMXJvbGhhBF9TAzk3MzU5
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MwNzM-
[13]
https://groups.yahoo.com/neo;_ylc=X3oDMTJldjdkMzFzBF9TAzk3NDc2NTkwBGdycElkAzE5NzE4MDA5BGdy
cHNwSWQDMTcwNTA2MzEwOARzZWMDZnRyBHNsawNnZnAEc3RpbWUDMTQxMTk3MzA3Mw--
[14] https://info.yahoo.com/privacy/us/yahoo/groups/details.html
[15]
mailto:electrichandbag-unsubscribe@yahoogroups.com?subject=Unsubscribe
[16] https://info.yahoo.com/legal/us/yahoo/utos/terms/

670. Re: [electrichandbag] Service manual

Yahoo group: electrichandbag
Date: 2014-09-30 05:31:50 UTC
From: Hector Pascal
Topic: 663 Message: 670

There is some FT290 (MK1 & 2) information on KO4BB's excellent free site:

http://www.ko4bb.com/manuals/index.php?dir=Yaesu

David,
VK6JT

On Mon, Sep 29, 2014 at 5:54 PM, 'Wayne - VK5APN' vk5apn@...
[electrichandbag] <electrichandbag@yahoogroups.com> wrote:

>
>
> Hi
>
> Is this for the 790RMK11 or the 290RMK11
>
> Looking for the 790RMK11 if anyone has one, also interested in the 290RKM11
>
> Cheers and
> Regards
>
> Wayne
>
> VK5APN
>
>
>
> ----- Original Message -----
> From:
> electrichandbag@yahoogroups.com
>
> To:
> <electrichandbag@yahoogroups.com>
> Cc:
>
> Sent:
> Mon, 29 Sep 2014 08:44:31 +0200
> Subject:
> Re: [electrichandbag] Service manual
>
>
>
>
> Hi Kevin,
> Can I have a copy as mine is not a good copy especially the layout and not

> the full document.
> Thanks
> Mans. 9h1GB
>
> On 29 September 2014 08:28, 'kkyahoo' kkyahoo@...
> [electrichandbag] <electrichandbag@yahoogroups.com> wrote:
>
>>
>>
>> □
>> There is a technical supplement for the mk2. Covers alignment, schematics
>> etc. I have the pdf if that helps.
>>
>> Kevin
>>
>> ----- Original Message -----
>> *From:* Mansueto Grech mansueto.grech@... [electrichandbag]
>> <mansueto.grech@...+%5Belectrichandbag%5D>
>> *To:* electrichandbag@yahoogroups.com
>> *Sent:* Monday, September 29, 2014 5:42 AM
>> *Subject:* Re: [electrichandbag] Service manual
>>
>>
>>
>> Hi David,
>> A workshop manual does exist for the mk2 but the copy I came across was
>> not complete and of bad quality. Should have a copy somewhere if
>> interested. No service or workshop manual was ever issued as far as I know.
>> 73's
>> Mans 9H1GB
>> On Sep 29, 2014 1:41 AM, "ve2ebp@... [electrichandbag]" <
>> electrichandbag@yahoogroups.com> wrote:
>> >
>> >
>> >
>> > Thank you very much David
>> >
>> >
>>
>>
>>
>
>

671. A 290 fault thats new on me. Any ideas?

Yahoo group: electrichandbag
Date: 2014-10-03 15:59:02 UTC
From: special@...
Topic: 671 Message: 671

I thought I'd come across most 290 faults over the years but today I came across a new one which, before I dive in with my big heavy boots, I thought I'd throw it to the group.

The owner of this FT 290 told me that he had been having the normal long start up problem (AGC) fault which had now got annoyingly long. He'd heard about the resistor mod and asked if I'd do it so I said yes as he's an old mate.

However a couple of weeks later when he finally brought the thing to me, he told me that it now has a different fault and it's one I've not seen before.

On turning the power on, the S meter is almost but not quite hard over to the right.
However the receive side has the normal noise levels for whatever mode is selected.
The PTT does nothing though and the LCD display is stuck on 5.000.0
Rotating the tuning does nothing and none of the push buttons are working either.
The volume and squelch controls work as does the mode change switch.

When using another rig tuned to 145.000 MHz and transmitting in any mode and selecting the relevant mode on the faulty rig it receives apparently perfectly.

It almost looks as if it's locked up partway through a cpu reset.

The back up battery is good and I have tried another reset a couple of times with no success.

Apparently he'd left the rig running on batteries and he came back to find this situation.

So any ideas out there?

Slim Haines

672. Re: [electrichandbag] A 290 fault thats new on me. Any ideas?

Yahoo group: electrichandbag
Date: 2014-10-06 13:02:35 UTC
From: g4sra
Topic: 671 Message: 672

On 03/10/14 16:59, special@... [electrichandbag] wrote:
> I thought I'd come across most 290 faults over the years but today I came across a new one which, before I dive in with my big heavy boots, I thought I'd throw it to the group.
>
> The owner of this FT 290 told me that he had been having the normal long start up problem (AGC) fault which had now got annoyingly long. He'd heard about the resistor mod and asked if I'd do it so I said yes as he's an old mate.
>
> However a couple of weeks later when he finally brought the thing to me, he told me that it now has a different fault and it's one I've not seen before.
>
> On turning the power on, the S meter is almost but not quite hard over to the right. However the receive side has the normal noise levels for whatever mode is selected.
> The PTT does nothing though and the LCD display is stuck on 5.000.0
> Rotating the tuning does nothing and none of the push buttons are working either.
> The volume and squelch controls work as does the mode change switch.
>
> When using another rig tuned to 145.000 MHz and transmitting in any mode and selecting the relevant mode on the faulty rig it receives apparently perfectly.
>
> It almost looks as if it's locked up partway through a cpu reset.
>
> The back up battery is good and I have tried another reset a couple of times with no success.
>
> Apparently he'd left the rig running on batteries and he came back to find this situation.
>
> So any ideas out there?
>
> Slim Haines
>
Check to see if TX is disabled because the PLL is out of lock (it often
is on rigs). If so, that may give you a starting point.

673. Re: A 290 fault thats new on me. Any ideas?

Yahoo group: electrichandbag
Date: 2014-10-06 13:04:26 UTC
From: barfield673@...
Topic: 671 Message: 673

Hmmm, odd one. Like you say, sounds like the CPU isnt starting up properly. Check the clock crystal is running properly, that would be my first thought.

It certainly sounds like a CPU/controller problem

Martin G7MRV

674. Re: A 290 fault thats new on me. Any ideas?

Yahoo group: electrichandbag
Date: 2014-10-06 14:31:10 UTC
From: special@...
Topic: 671 Message: 674

Here's a quick update.
It appears that this fault goes away when the rig is left unused for 24 hours or so.
Then, on switch on everything works : tuning, push buttons etc until the moment you hit the PTT, whereupon the rig goes back into displaying 5.000.0, no buttons work but it still receives on all modes on that frequency.
Leave it off for another 24 hours and it repeats the working not working cycle.
As long as the weather warms back up a bit I'll get into the workshop in a day or so and start checking a bit more.

The thing that throws me most is that the rig still works on all modes on receive and works absolutely perfectly.

Watch this space as they say

Slim Haines

675. Re: [electrichandbag] Re: A 290 fault thats new on me. Any ideas?

Yahoo group: electrichandbag
Date: 2014-10-06 14:36:07 UTC
From: Mansueto Grech
Topic: 671 Message: 675

Hi Slim,
Check the backup battery and maybe do a reset too.
GL
Mans 9H1GB
On Oct 6, 2014 4:31 PM, "special@... [electrichandbag]" <
electrichandbag@yahoogroups.com> wrote:

>
>
> Here's a quick update.
> It appears that this fault goes away when the rig is left unused for 24
> hours or so.
> Then, on switch on everything works : tuning, push buttons etc until the
> moment you hit the PTT, whereupon the rig goes back into displaying
> 5.000.0, no buttons work but it still receives on all modes on that
> frequency.
> Leave it off for another 24 hours and it repeats the working not working
> cycle.
> As long as the weather warms back up a bit I'll get into the workshop in a
> day or so and start checking a bit more.
>
> The thing that throws me most is that the rig still works on all modes on
> receive and works absolutely perfectly.
>
> Watch this space as they say
>
> Slim Haines
>
>

676. Re: [electrichandbag] Re: A 290 fault thats new on me. Any ideas?

Yahoo group: electrichandbag
Date: 2014-10-06 15:08:51 UTC
From: special@...
Topic: 671 Message: 676

Hi Mans.

The back up battery tests at just over 3V and I've tried several (what I believe to be the reset routine) resets with no luck.
It almost looks like it's doing a partial reset while in operation as it hangs up showing 5.000.0 which as I understand it is the reset default frequency.
I have never needed to carry out a reset on an FT 290 before but always believed that it was a case of grounding pin 4 of CN003 the connector between the keyboard and control PCBs. This appears to do nothing and i have tried it several times.

Slim

677. Re: [electrichandbag] Re: A 290 fault thats new on me. Any ideas?

Yahoo group: electrichandbag
Date: 2014-10-06 17:57:50 UTC
From: Mansueto Grech
Topic: 671 Message: 677

Hi Slim,
Thanks for the update. May O,suggest you remove the battery and leave it unconnected for an hour or so. Power must also be off.

GL
Mans 9H1GB
On Oct 6, 2014 5:08 PM, "special@... [electrichandbag]" <electrichandbag@yahoogroups.com> wrote:

>
>
> Hi Mans.
>
> The back up battery tests at just over 3V and I've tried several (what I
> believe to be the reset routine) resets with no luck.
> It almost looks like it's doing a partial reset while in operation as it
> hangs up showing 5.000.0 which as I understand it is the reset default
> frequency.
> I have never needed to carry out a reset on an FT 290 before but always
> believed that it was a case of grounding pin 4 of CN003 the connector
> between the keyboard and control PCBs. This appears to do nothing and i
> have tried it several times.
>
> Slim
>
>

678. Re: [electrichandbag] Re: A 290 fault thats new on me. Any ideas?

Yahoo group: electrichandbag
Date: 2014-10-06 18:50:07 UTC
From: special@...
Topic: 671 Message: 678

Hi again Mans.

That too has been done.

I have disconnected all power and turned off the backup battery and left the rig switched on to drain any remaining power.
This has been done with it left untouched for 24 hours.

Then with power reconnected, on switch on the rig will then work normally for a very short time (a matter of a couple of minutes maximum) but the moment you operate it or press the PTT the display goes back to 5.000.0 and all controls cease to function again.

Certainly a weird fault.

Slim

679. FT-290 MK1 no RX or TX after several years of no use

Yahoo group: electrichandbag
Date: 2014-10-09 16:53:35 UTC
From: mail@...
Topic: 679 Message: 679

I last used my FT-290R over ten years ago and it was working OK. Switched it on this week and all seemed well with 'white' noise on both FM and SSB modes but although it switched to TX there is no output signal and also no receive signal (tested with another FM rig on the same frequency nearby) S meter remains at zero.

Would welcome suggestions as to probably causes of such faults after a long period of non use.

Thanks,

Richard G3XWH

680. Re: FT-290R with FM problem

Yahoo group: electrichandbag
Date: 2014-10-10 23:16:02 UTC
From: mark@...
Topic: 592 Message: 680

Hi everyone, I know this is an old post, but I just thought I'd leave a comment as I had exactly the same issue on an FT290R I bought recently. I also traced the fault to T1013, but I wondered why this component had failed. In my experience of working on radio equipment, they are usually extremely reliable and in the years I've worked on this kind of kit, professionally or for leisure, I can't remember having changed one. Here, the problem - on mine at least - was almost certainly down to failing electrolytics. Right next to this inductor is a 10uf 16V capacitor, C104. On my rig, a capacitor test with an ESR meter showed nearly all of the capacitors of this value to be in poor shape, one with clear evidence of venting that I could see. I run an electronics workshop for my daytime job and I see a lot of failed or failing electroytics, and quite often there is no visible discharge, but nearby components are tarnished from a gaseous emission. In my FT290R (and no doubt in other rigs with ageing parts), the symptoms of audio loss were much as described in this thread. What was happening, was the adjacent capacitor had emitted some nastiness which had (at the very least) affected the internal capacitor which sits in the base of T1013, and caused it to misbehave once current was applied to it - hence the change of resonant frequency of T1013 and consequent loss of audio. I went on to change all the 10uf caps in the rig, and then all the other electrolytics since I was at it (some weren't in great shape) with 105C ones - it now has a good as new feel :) I just thought I'd add this for interest, and also to point out that as in many rigs of this age, failing caps are a now a major cause of ills, and well worth checking. This can be done in circuit with a good ESR meter. Incidentally, I did the same with my ailing FT225RD, and ended up with a back to spec and very nice to use rig. 73, Mark Wheeler G6DOD

681. Re: FT-290R with FM problem

Yahoo group: electrichandbag
Date: 2014-10-10 23:23:24 UTC
From: mark@...
Topic: 592 Message: 681

Something I forgot to say - I found some 455kHz IFTs I'd ordered from eBay a couple of years ago, and although bigger than the original T1013 coil, I managed to fit one into the same holes with a little bending of the pins. The rig works perfectly and now the audio is full and clean, with the squelch now behaving fine.

682. Re: [electrichandbag] Re: FT-290R with FM problem

Yahoo group: electrichandbag
Date: 2014-10-11 09:57:25 UTC
From: kkyahoo
Topic: 592 Message: 682

Mark,

What ESR meter did you use? What would be a bad vs good reading on ESR?

73

Kevin
----- Original Message -----
From: mark@...e.co.uk [electrichandbag]
To: electrichandbag@yahoogroups.com
Sent: Saturday, October 11, 2014 12:16 AM
Subject: [electrichandbag] Re: FT-290R with FM problem

Hi everyone, I know this is an old post, but I just thought I'd leave a comment as I had exactly the same issue on an FT290R I bought recently. I also traced the fault to T1013, but I wondered why this component had failed. In my experience of working on radio equipment, they are usually extremely reliable and in the years I've worked on this kind of kit, professionally or for leisure, I can't remember having changed one. Here, the problem - on mine at least - was almost certainly down to failing electrolytics. Right next to this inductor is a 10uf 16V capacitor, C104. On my rig, a capacitor test with an ESR meter showed nearly all of the capacitors of this value to be in poor shape, one with clear evidence of venting that I could see. I run an electronics workshop for my daytime job and I see a lot of failed or failing electroytics, and quite often there is no visible discharge, but nearby components are tarnished from a gaseous emission. In my FT290R (and no doubt in other rigs with ageing parts), the symptoms of audio loss were much as described in this thread. What was happening, was the adjacent capacitor had emitted some nastiness which had (at the very least) affected the internal capacitor which sits in the base of T1013, and caused it to misbehave once current was applied to it - hence the change of resonant frequency of T1013 and consequent loss of audio. I went on to change all the 10uf caps in the rig, and then all the other electrolytics since I was at it (some weren't in great shape) with 105C ones - it now has a good as new feel :) I just thought I'd add this for interest, and also to point out that as in many rigs of this age, failing caps are a now a major cause of ills, and well worth checking. This can be done in circuit with a good ESR meter. Incidentally, I did the same with my ailing FT225RD, and ended up with a back to spec and very nice to use rig. 73, Mark Wheeler G6DOD

683. Re: FT-290R with FM problem

Yahoo group: electrichandbag
Date: 2014-10-11 23:29:29 UTC
From: mark@...
Topic: 592 Message: 683

Hi Kevin

It's an EVB ESR meter, which I believe was originally supplied by Dick Smith in Australia as a kit. There's a guy in Portugal who sells them ready built - you should be able to find him on Google if you search for EVB ESR meters. There's a graph on the front of the meter of ideal values for different capacitors, and with 10uf 16V ones as fitted in FT290Rs, you shouldn't expect to see anything much over 2 ohms. Some of mine measured 35..... Failing that, go for an Atlas one :)

73,

Mark
G6DOD

684. Re: [electrichandbag] Re: FT-290R with FM problem

Yahoo group: electrichandbag
Date: 2014-10-12 08:38:46 UTC
From: kkyahoo
Topic: 592 Message: 684

Mark,

Thanks, got the Atlas one which measures C as well. Surprising how many caps were faulty in my FRG8800, esp in the power supply.

Cheers

Kevin
----- Original Message -----
From: mark@... [electrichandbag]
To: electrichandbag@yahoogroups.com
Sent: Sunday, October 12, 2014 12:29 AM
Subject: [electrichandbag] Re: FT-290R with FM problem

Hi Kevin

It's an EVB ESR meter, which I believe was originally supplied by Dick Smith in Australia as a kit. There's a guy in Portugal who sells them ready built - you should be able to find him on Google if you search for EVB ESR meters. There's a graph on the front of the meter of ideal values for different capacitors, and with 10uf 16V ones as fitted in FT290Rs, you shouldn't expect to see anything much over 2 ohms. Some of mine measured 35..... Failing that, go for an Atlas one :)

73,

Mark
G6DOD

685. Re: [electrichandbag] Re: FT-290R with FM problem

Yahoo group: electrichandbag
Date: 2014-10-12 16:19:23 UTC
From: rfmicrowave1@...
Topic: 592 Message: 685

Link EVB ESR

http://clientes.netvisao.pt/greenpal/evb1.htm
http://clientes.netvisao.pt/greenpal/evb1.htm

Roberto iw5bsf

686. Re: [electrichandbag] Re: FT-290R with FM problem

Yahoo group: electrichandbag
Date: 2014-10-12 21:13:34 UTC
From: mark@...
Topic: 592 Message: 686

Ciao Roberto, e grazie! Mark

687. Re: [electrichandbag] Re: FT-290R with FM problem

Yahoo group: electrichandbag
Date: 2014-10-12 21:16:15 UTC
From: mark@...
Topic: 592 Message: 687

Yep, prime candidates for failure :)

688. Battery Box

Yahoo group: electrichandbag
Date: 2014-10-18 10:57:56 UTC
From: fell1965@...
Topic: 193 Message: 688

I have just finished repairing and realigning a FT690 Mk2 I recently purchased, but the unit did not come with the origional battery box, is there anyone out there with one for sale or even the 6mtr clip on PA unit just to finish the job, many thanks in advance Karl, M0KRL

689. Re: FT-290 MK1 no RX or TX after several years of no use

Yahoo group: electrichandbag
Date: 2014-10-20 08:53:07 UTC
From: mail@...
Topic: 679 Message: 689

It now looks as if the source of the problem is the PLL XTAL 18.7414MHz, if anyone knows of one for sale I would be grateful.

73,

Richard G3XWH

690. FT290 switches

Yahoo group: electrichandbag
Date: 2014-10-22 14:43:23 UTC
From: mark@...
Topic: 690 Message: 690

Hi all

I recently bought another FT290R from eBay. It's not in great shape, although I was fortunate enough to find a Mutek pre-amp in it which is now installed in my other rig :) I'd like to get this one going though, but the previous owner had obviously used it in a very gritty environment, and the pushbutton switches are sadly damaged beyond repair.

Does anyone know where these might be available (they were made by Alps), or perhaps someone has the complete PCB with a serviceable set of switches - it would be appreciated if you could let me know if you have one that you are prepared to part with.

Thanks,

Mark Wheeler
G6DOD

691. FT290 low power TX +smeter and squelch problem.

Yahoo group: electrichandbag
Date: 2014-10-30 21:31:16 UTC
From: mail@...
Topic: 691 Message: 691

Hi,
I've got a problem with my FT290v1 Symptoms:
On RX the smeter goes hard to the right.
The squelch used to be at about the 10o'clock position, is now at about the 3o'clock position.
I can no longer open my local repeater, but I can hear it fine at the right frequency, and tuning another HT to the repeater input frequency hears the FT290 sending a tone.
Possible cause: my 3 year old nephew getting at the radio and twiddling every knob and pressing every button in sight while it had no antenna connected (or pulled out, maybe fortunately!)
Any ideas?
Thanks.
Bill

692. Re: [electrichandbag] FT290 low power TX +smeter and squelch problem.

Yahoo group: electrichandbag
Date: 2014-10-30 22:42:12 UTC
From: g4sra
Topic: 691 Message: 692

On 30/10/14 21:31, mail@... [electrichandbag] wrote:
> Hi,
> I've got a problem with my FT290v1 Symptoms:
> On RX the smeter goes hard to the right.
If it also stays to the left on TX (mW out instead of 3W) you most
likely have the ALC\AGC fault.

> The squelch used to be at about the 10o'clock position, is now at about the 3o'clock position.
> I can no longer open my local repeater, but I can hear it fine at the right frequency, and tuning another HT to the repeater input frequency hears the FT290 sending a tone.
> Possible cause: my 3 year old nephew getting at the radio and twiddling every knob and pressing every button in sight while it had no antenna connected (or pulled out, maybe fortunately!)
On the bright side, if you have the ALC\AGC fault it will have reduced
the stress your power transistor.

> Any ideas?
> Thanks.
> Bill
>

693. Re: [electrichandbag] FT290 low power TX +smeter and squelch problem.

Yahoo group: electrichandbag
Date: 2014-10-30 22:54:54 UTC
From: g4sra
Topic: 691 Message: 693

Forgot to say.....

Leave the rig powered up (dummy loaded) for three days and then check
it. The meter reading may drop and the RX\TX work normally again until
you power it off for a couple of hours.

Mine now 'warms up' in under ten minutes with regular use (which is the
reason I have never managed to fix it, I am too slow).

On 30/10/14 22:42, g4sra g4sra@... [electrichandbag] wrote:
> On 30/10/14 21:31, mail@... [electrichandbag] wrote:
>> Hi,
>> I've got a problem with my FT290v1 Symptoms:
>> On RX the smeter goes hard to the right.
> If it also stays to the left on TX (mW out instead of 3W) you most
> likely have the ALC\AGC fault.
>
>> The squelch used to be at about the 10o'clock position, is now at about the 3o'clock
position.
>> I can no longer open my local repeater, but I can hear it fine at the right frequency,
and tuning another HT to the repeater input frequency hears the FT290 sending a tone.
>> Possible cause: my 3 year old nephew getting at the radio and twiddling every knob and
pressing every button in sight while it had no antenna connected (or pulled out, maybe
fortunately!)
> On the bright side, if you have the ALC\AGC fault it will have reduced
> the stress your power transistor.
>
>> Any ideas?
>> Thanks.
>> Bill
>>
>
>

694. Re: FT290 low power TX +smeter and squelch problem.

Yahoo group: electrichandbag
Date: 2014-11-01 10:14:47 UTC
From: g3vvt@...
Topic: 691 Message: 694

Hi Bill,

I believe what you describe is a classic description of a problem on the FT290R series 1 detailed by Harry Leeming, G3LLL in his column in Practical Wireless quite a number of years back. Harry was a retailer in Yaesu amateur radio equipment from the early days of the FT290R and ran a repair service with the business in those days. Will send you the details of the cure that Harry came to use at the time direct to your email address as an attachment. Has been detailed on this site a number of years back.

It may be that the origins of the fault are associated with possible leakage on the PCB or failing electrolytic capacitors. A report of an "umbrella job" of replacing all the small electrolytics detailed recently are said also to effect a cure. I have a faulty FT290R that has similar problems to yours that is awaiting time at the workbench here, so have been collecting information on possible methods of repair for a quite a while.

Regards,
Bob, G3VVT

In a message dated 31/10/2014 09:25:07 GMT Standard Time,
electrichandbag@yahoogroups.com writes:

Hi,
I've got a problem with my FT290v1 Symptoms:
On RX the smeter goes hard to the right.
The squelch used to be at about the 10o'clock position, is now at about the 3o'clock position.
I can no longer open my local repeater, but I can hear it fine at the right frequency, and tuning another HT to the repeater input frequency hears the FT290 sending a tone.
Possible cause: my 3 year old nephew getting at the radio and twiddling every knob and pressing every button in sight while it had no antenna connected (or pulled out, maybe fortunately!)
Any ideas?
Thanks.
Bill

695. Re: [electrichandbag] Re: FT290 low power TX +smeter and squelch problem.

Yahoo group: electrichandbag
Date: 2014-11-01 20:36:22 UTC
From: g4sra
Topic: 691 Message: 695

On 01/11/14 10:14, g3vvt@... [electrichandbag] wrote:
>
> Hi Bill,
>
> I believe what you describe is a classic description of a problem on the
> FT290R series 1 detailed by Harry Leeming, G3LLL in his column in Practical
> Wireless quite a number of years back.
If I recall Harry's article correctly, it only cited issues with RX i.e.
AGC, but please check as I haven't.

The ALC control is derived earlier in the chain than the FET in question
in Harry's article. I do recall him stating that he never identified the
actual issue. Sometimes simply strapping a resistor to ground only works
for a week or so and then the fault returns. The result is more likely
attributable to the effect of applying a hot soldering iron to the area.

On the plus side, it is a 'harmless' mod with no side effects, try it
and see...

> Harry was a retailer in Yaesu
> amateur radio equipment from the early days of the FT290R and ran a repair
> service with the business in those days. Will send you the details of the cure
> that Harry came to use at the time direct to your email address as an
> attachment. Has been detailed on this site a number of years back.
>
> It may be that the origins of the fault are associated with possible
> leakage on the PCB or failing electrolytic capacitors. A report of an "umbrella
> job" of replacing all the small electrolytics detailed recently are said
> also to effect a cure. I have a faulty FT290R that has similar problems to
> yours that is awaiting time at the workbench here, so have been collecting
> information on possible methods of repair for a quite a while.
>
> Regards,
> Bob, G3VVT
>
>
>
> In a message dated 31/10/2014 09:25:07 GMT Standard Time,
> electrichandbag@yahoogroups.com writes:
>
> Hi,
> I've got a problem with my FT290v1 Symptoms:
> On RX the smeter goes hard to the right.
> The squelch used to be at about the 10o'clock position, is now at about

> the 3o'clock position.
> I can no longer open my local repeater, but I can hear it fine at the
> right frequency, and tuning another HT to the repeater input frequency hears
> the FT290 sending a tone.
> Possible cause: my 3 year old nephew getting at the radio and twiddling
> every knob and pressing every button in sight while it had no antenna
> connected (or pulled out, maybe fortunately!)
> Any ideas?
> Thanks.
> Bill
>
>
>
>
>

696. Re: FT290 low power TX +smeter and squelch problem.

Yahoo group: electrichandbag
Date: 2014-11-03 13:15:47 UTC
From: mail@...
Topic: 691 Message: 696

Hi all. I've connected the FT290 to a bench PSU and left it running into a dummy load. I've kept the tone button down with a rubber band round the set and a PCB stand-off to press down. First night the PCB stand-off pinged away somewhere. Second night the current the set used crept up until it hit the current limit. Started at about 100mA and finished at about 500mA, which caused the voltage to drop to about 6V. Currently running at about 700mA, 12V. The smeter needle looks to be behaving more sensibly and the squelch is back to a more normal position. A quick test transmission opened my local repeater. So looking good! I'll give it another day or two transmitting to the dummy load. Any problems in future and it's getting a 47K resistor added.
Thanks for the help.
Bill (M1BKF).

697. FT-290R and HF transverter.

Yahoo group: electrichandbag
Date: 2015-01-02 08:30:49 UTC
From: Rui Martins
Topic: 697 Message: 697

Hi,

I will sell my FT-209r with mobile case, fl-2010, fl-2050, transport bag and Tokyo Hi-power hx240 hf transverter.

Rui Martins

698. Equivalent load for whip antenna

Yahoo group: electrichandbag
Date: 2015-03-01 22:22:46 UTC
From: g8xlh@...
Topic: 698 Message: 698

Hi All,

I have just acquired an FT290r with the telescopic antenna missing.

From what I have read the aerial should be in place even if you are using the rear socket ?

I guess the chances of finding a replacement at a reasonable price is very slim.

Could you replace the internal antenna with a fixed capacitor to simulate the effect of the antenna being inserted into the grounded sleeve, or cut a length of tight fitting coax and connect the braid to where the hot connection for the antenna is ?

any help much appreciated

Regards

Alan G8XLH

699. Re: Equivalent load for whip antenna

Yahoo group: electrichandbag
Date: 2015-03-02 15:38:12 UTC
From: david.m.k@...
Topic: 698 Message: 699

A very interesting question.

I have disconnected mine at the tag board because I have a Mutek Board fitted. I had oscillations and carefully re-read the instructions, they talk about removing the whip then the tube, but on reassembly only refer to putting the tube back. I agree some sort of capacitor my well work because this forms part of the tuning.

I would like to know what the right thing to do is as well.

73’s

David

700. Re: [electrichandbag] Equivalent load for whip antenna

Yahoo group: electrichandbag
Date: 2015-03-02 18:41:47 UTC
From: g4sra
Topic: 698 Message: 700

A very common mod - install a BNC Chassis socket connected up with RG58.

Re-align the first RX stages and last TX stages following the
instructions in the manual.

TIP: to remove the old telescopic antenna mounting bush use a warm (too
hot to touch, too cold to melt solder) soldering iron to push it out and
then the plastic won't crack.

On 01/03/15 22:22, g8xlh@... [electrichandbag] wrote:
> Hi All,
>
>
> I have just acquired an FT290r with the telescopic antenna missing.
>
>
> From what I have read the aerial should be in place even if you are using the rear socket
?
>
>
> I guess the chances of finding a replacement at a reasonable price is very slim.
>
>
> Could you replace the internal antenna with a fixed capacitor to simulate the effect of
the antenna being inserted into the grounded sleeve, or cut a length of tight fitting coax
and connect the braid to where the hot connection for the antenna is ?
>
>
> any help much appreciated
>
>
> Regards
>
>
> Alan G8XLH
>
>
>
>

701. Parts Needed

Yahoo group: electrichandbag
Date: 2015-03-02 19:08:18 UTC
From: <w7apm@...>
Topic: 701 Message: 701

Need volume control and knobs.

Tnx!

Marty

KL7AM

702. New file uploaded to electrichandbag

Yahoo group: electrichandbag
Date: 2015-03-08 23:34:45 UTC
From: electrichandbag@yahoogroups.com
Topic: 2 Message: 702

Hello,

This email message is a notification to let you know that
a file has been uploaded to the Files area of the electrichandbag
group.

File : /ft-290-gain.doc
Uploaded by : joapar123 <joapar@...>
Description : Ft-290 increase sensitivity and more info japanese repair site

You can access this file at the URL:
https://groups.yahoo.com/neo/groups/electrichandbag/files/ft-290-gain.doc

To learn more about file sharing for your group, please visit:
https://help.yahoo.com/kb/index?page=content&y=PROD_GRPS&locale=en_US&id=SLN15398

Regards,

joapar123 <joapar@...>

703. Your Support Wanted

Yahoo group: electrichandbag
Date: 2015-04-11 19:55:35 UTC
From: barfield673@...
Topic: 703 Message: 703

Myself, Martin G7MRV (the group owner!) and Bob M1BBV, will be doing the long distance challenge Lyke Wake Walk on 28/06/2015, to raise money on behalf of Mines Advisory Group Landmines, cluster munitions, UXO http://www.maginternational.org/

http://www.maginternational.org/

Landmines, cluster munitions, UXO http://www.maginternational.org/ MAG is a not-for-profit organisation clearing landmines, unexploded ordnance (UXO) and other remnants of conflict for the benefit of communities worldwide.

View on www.maginternation... http://www.maginternational.org/
Preview by Yahoo

We will be doing two SOTA activations on 2m during the walk, and would love any sponsorship or donations from group members who would like to support us and our charity.

To support us, please visit our JustGiving page here Read Martin's story https://www.justgiving.com/MB-LykeWake2015

https://www.justgiving.com/MB-LykeWake2015

Read Martin's story https://www.justgiving.com/MB-LykeWake2015 Martin is raising money to help MAG (Mines Advisory Group) save and improve lives worldwide.

View on www.justgiving.com https://www.justgiving.com/MB-LykeWake2015
Preview by Yahoo

Yes, this is a blatent plug by the group owner! The link to the group? Well, the 2m SSB SOTA will use my FT-290mk1 !!!

Regards
Martin G7MRV
Group Owner and Admin

704. Squelch on ssb

Yahoo group: electrichandbag
Date: 2015-04-13 22:42:00 UTC
From: dave.gotech@...
Topic: 704 Message: 704

Has anyone managed a mod to allow use of Squech on SSB.
Regards
Dave...G4DAX

705. Replacing melted or corroded battery holders

Yahoo group: electrichandbag
Date: 2015-04-18 21:27:39 UTC
From: barfield673@...
Topic: 705 Message: 705

The terminals on my original battery holders finally gave up and disintegrated! Original Yaesu holders, or even exact replacements, are almost impossible to find

I have successfully replaced the holders with new modern units, after a bit of rather brutal modification!

Most modern 4xC plastic battery holders are 110mm long, the originals were 108mm! They do not fit as is. But it occurred to me that the mechanical support was provided by the steel carrier, so the holders didnt technically need to be intact!

So, to make modern holders fit as replacements - I simply cut them in half! Shaving a bit off until they were a total length of 108mm, and then putting them in the carrier and letting the carrier provide the mechanical support!

Photos can be seen on my blog CQ DX DE G7MRV QRP K http://g7mrv.blogspot.co.uk/

http://g7mrv.blogspot.co.uk/

CQ DX DE G7MRV QRP K http://g7mrv.blogspot.co.uk/ A week or so ago I ordered, off ebay and from China, a kit for a 40m Pixie transceiver. This was a tad over £3 including postage! I cant source the part...

View on g7mrv.blogspot.co.uk http://g7mrv.blogspot.co.uk/
Preview by Yahoo

Simple and cheap! Total cost of repair £3.98

I have a set of 8x 4000mAhr NiMH's in mine. A further thought is that if your holders are caput, and you can build a suitable charger, then the holders could be dispensed with entirely and a battery pack be made up using modern tagged C, or even better sub-C, Hybrid NiMH cells, or even lithiums.

Hope this is useful for someone

Martin

706. FT290R MkII Frequency Range Modifications & Spares

Yahoo group: electrichandbag
Date: 2015-04-19 10:38:15 UTC
From: datatag@...
Topic: 706 Message: 706

Hello All

I've been a Radio Amateur since taking my RAE in 1984 but gave up the hobby in the early 90s when family came along, and ended up selling my trusty FT-290R with Mutek front end as I didn't have the time to use it!

I revalidated my licence a few years ago and am just getting back into the swing of things, recently purchasing a Yaesu VX-3E along with a used FT-290R MkII from a well-known auction site but, unfortunately, not everything was as it seemed....

I've had a few issues with the FT-290R MkII and to cut a long story short it turned out that the PA had died and whilst the rig transmitted OK to my VX-3E nearby, my RF power meter confirmed it was only putting out a few milliwatts into a dummy load. Inside the rig I found that the lamp switch was broken and the actuator shaft had been cut short whilst in the battery pack the lamp button/lock was missing, the two cardboard "C" cell contact assemblies had been removed, the plastic cell separators had been hacked away and someone had fitted a 1000mAh "AA" NiCad pack!! I wish I'd spotted this sooner as I'd just bought a set of ten 2600mAh NiMh "C" cell batteries to go in it (they came in pairs), along with a proper NiMh charger for 8-10 cells.

I ended up buying a new PA transistor and fitting this restored the output power to normal. I also bought a used FBA-8 battery holder complete with original lamp button/lock but had a few problems with this as some of the battery contacts were tarnished and corroded. I cleaned up all the contacts and applied some contact grease to stop any more trouble, and this sorted out the power issues.

When I finally got all this done I found that the rig has been modified to receive and transmit on any frequency between 140 and 150MHz - and I would like to return the rig to standard "C1" or "B" spec so it only covers 144-148MHz (or 146Mhz if that isn't possible). Does anyone know how the wide-band mod was done in the first place and how to "undo" it?

Also, would anyone have any spares such as a lamp switch and actuator shaft? I could probably repair the original shaft or make a replacement, but it seems like the original switch is no longer available.

Any help or advice would be appreciated!

73s

Derek - G1LZL [QTHR IO84FO]

707. Re: FT290R MkII Frequency Range Modifications & Spares

Yahoo group: electrichandbag
Date: 2015-04-19 10:59:09 UTC
From: neildrnkll@...
Topic: 706 Message: 707
Attachments: 1 described; binary payloads are missing from this source WARC

Hi
I found this attached picture on the internet a while ago.
It might be useful.
Neil

708. Power being output on USB with no mod

Yahoo group: electrichandbag
Date: 2015-04-20 17:47:46 UTC
From: barfield673@...
Topic: 708 Message: 708

Having just repaired the battery holders on my FT-290R mk1, ive come to give it a good check over prior to taking it up on the hills for SOTA - and a good job I have!

It seems that for some reason im putting out nearly 2W in USB mode with NO modulation! The S-meter also sees and confirms this, being almost FSD, whistling up the mic shows some deflection of the meter needle up from this, and some detectable modulation (unfortunately, although my comms test set can show me that theres spurious power there, It cant cope with actual SSB!)

Likewise, in low power, I see about a third of a watt with no mod.

FM works just fine, as does LSB, in both Hi and Lo power.

Clearly something is either getting into the mic audio chain that shouldnt be there (theres no CTCSS or anything on this rig) or, perhaps more likely, I have a carrier balance fault?

I thought I'd ask on the group if anyone has seen this before, before I start making adjustments!

Any ideas?

Martin G7MRV

709. Re: FT290R MkII Frequency Range Modifications & Spares

Yahoo group: electrichandbag
Date: 2015-04-20 18:25:11 UTC
From: datatag@...
Topic: 706 Message: 709

Hi Neil

Many thanks for the info, looks like I just need to (re)fit a zero-ohm link resistor to get the rig back to normal.

I'm currently working away from home (IO81LD90) so I'll give this a go when I return.

73s

Derek, G1LZL

710. Re: Power being output on USB with no mod

Yahoo group: electrichandbag
Date: 2015-04-21 09:07:58 UTC
From: barfield673@...
Topic: 708 Message: 710

Answered my own question! (I suppose as group owner - I ought to be the one answering these sorts of questions!)

It was indeed the carrier balance - adjusted via VR1001. Didnt seem to affect LSB in any way though, which I thought odd.

So thats two faults fixed in a few days - just need to sort the intermittent PTT switch now!

712. Re: FT290R MkII Frequency Range Modifications & Spares

Yahoo group: electrichandbag
Date: 2015-04-21 11:15:26 UTC
From: yahoo@...
Topic: 706 Message: 712

Hi guys good to have found you.

I have a similar issue with my 790RII. I want to remove the 1750 tone burst and fit a CTCSS board.

As I see it these links and diodes determine the model A, B, C or X, and by implication the frequency range, repeater offset and whether a tone board is fitted.

But the question is, which link or diode determines what?

There are also the two "BURST / CALL" links on the CPU unit I still have to figure out. I like understanding stuff but this particular radio is stumping me...
EDIT to add: figured it out. The schematic is wrong :-) This is not new to me. With the jumpers in the "burst" position as indicated, the call button on the front panel goes via JP05 to the two diodes D03 and grounds the PTT line. It also goes back through JP04 to the centre pin and from there to the transistor Q06 which sends power to the tone board. CALL, in other words. With the jumpers to "call" as indicated, the CALL button gets re-routed to the BURST line on the SW unit, which causes Q01 to close the switch matrix... in other words, the CALL button becomes part of the switch matrix and the processor needs to deal with it. It does so via R22 to JP04 which then turns power to the CTCSS board on.

Simple, once one accepts that the schematic can be wrong :-)

Currently stupmed by the purpose of the "BUSY / TIME" switch on the CPU unit? I can understand wanting different scan modes maybe (over here 70cm isn't busy enough to test what happens) but why is the switch so inaccessible?

713. Re: FT290R MkII Frequency Range Modifications & Spares

Yahoo group: electrichandbag
Date: 2015-04-21 14:23:19 UTC
From: yahoo@...
Topic: 706 Message: 713

Yargh, follow up on my own post. Of course the schematic is right, but confusing (well, it confused me :-) The functionality is aligned with the schematic, it's just that "BURST" line which actually presses a button to select the CALL channel.

Still trying to figure out what the diodes / resistors do.

714. FT290 Mk 1 - removing main board

Yahoo group: electrichandbag
Date: 2015-04-26 21:44:15 UTC
From: smallmetro@...
Topic: 714 Message: 714

I have an FT290 Mk 1 with a squelch fault. I suspect the problem has already been covered in an earlier series of postings, but when I tried to get the main board out to investigate, I couldn't remove it.

I disconnected everything obvious but the board still wouldn't move. I could lift the edges a little but didn't want to cause any damage so didn't apply much force.

Am I missing something? I couldn't see any instructions anywhere so I assume it's fairly self explanatory, but rather than break someting I put it all back together.

Thank in advance,

John
G4YTJ

715. Re: FT290 Mk 1 - removing main board

Yahoo group: electrichandbag
Date: 2015-04-27 09:43:19 UTC
From: dave.gotech@...
Topic: 714 Message: 715

John....its a while since I removed a main board but I am sure there is one or two screws in the component area of the board to stop it vibrating I gues. I seem to think it took me a while to find it/them. Dave.

716. Re: FT290 Mk 1 - removing main board

Yahoo group: electrichandbag
Date: 2015-04-28 14:08:57 UTC
From: john.pagett@...
Topic: 714 Message: 716

Thanks, Dave.

I'll have another go when I get time and if I manage to remove the board I'll put a document in the files section detailing what to do.

73
John
G4YTJ

717. GB0MAG this Sunday 28th

Yahoo group: electrichandbag
Date: 2015-06-25 11:35:19 UTC
From: barfield673@...
Topic: 717 Message: 717

Hi All,

OK, so this is a blatant plug by the group owner!

This coming sunday, 28th June, Myself G7MRV and Bob M1BBV are walking the Lyke Wake Walk for charity on behalf of Mines Advisory Group (MAG)

We will be operating the UKs 1st! 'mobile' Special Event Station' GB0MAG as we go, from around 08:00 BST

Although we originally intended to use HF, this proved too heavy, and using my FT-290mk1 had no advantage over my Alinco F1, which is what we will be using (with a J-pole mounted on my pack!)

We will operate 2m FM only, somewhere around 145.475Mhz

Please, if you are in range of the North Yorks Moors, give us a call!

even better - sponsor us here - https://www.justgiving.com/MB-LykeWake2015
https://www.justgiving.com/MB-LykeWake2015

718. Re: FT290 Mk 11

Yahoo group: electrichandbag
Date: 2015-06-29 22:32:58 UTC
From: jboys1229@...
Topic: 652 Message: 718

these are available at Shortwave Radio Shops, Ham Radio Supplies, Handheld CB Radio Sal http://www.radioworld.co.uk

http://www.radioworld.co.uk

Shortwave Radio Shops, Ham Radio Supplies, Handheld ... http://www.radioworld.co.uk Radioworld have been established since 1997, and have grown into one of the largest suppliers of amateur radio equipment & scanner aerials within the ...

View on www.radioworld.co.uk http://www.radioworld.co.uk
Preview by Yahoo

I just purchased 2 of these in brand new packaging from this site! I don't know how many they have or where they get them, but I bought 2!!!

719. Re: [electrichandbag] Re: FT290 Mk 11

Yahoo group: electrichandbag
Date: 2015-06-30 06:31:08 UTC
From: kkyahoo
Topic: 652 Message: 719

What did you buy??

----- Original Message -----
From: jboys1229@yahoo.com [electrichandbag]
To: electrichandbag@yahoogroups.com
Sent: Monday, June 29, 2015 11:32 PM
Subject: [electrichandbag] Re: FT290 Mk 11

these are available at Shortwave Radio Shops, Ham Radio Supplies, Handheld CB Radio Sal

Shortwave Radio Shops, Ham Radio Supplies, Handheld ... Radioworld have been established since 1997, and have grown into one of the largest suppliers of amateur radio equipment & scanner aerials within the ...
View on www.radioworld.co.uk Preview by Yahoo

I just purchased 2 of these in brand new packaging from this site! I don't know how many they have or where they get them, but I bought 2!!!

720. Re: FT290 Mk 11

Yahoo group: electrichandbag
Date: 2015-07-01 02:50:46 UTC
From: jboys1229@...
Topic: 652 Message: 720

The FBA-8 battery packs. New in the box!

721. Re: FT290 Mk 11

Yahoo group: electrichandbag
Date: 2015-07-01 11:04:38 UTC
From: special@...
Topic: 652 Message: 721

The FBA-8 isn't a battery pack it's simply a case to hold 9 C cells

It doesn't come with any batteries and at £34.94 a piece that seems pretty pricey.

Slim Haines

722. Re: FT290 Mk 11

Yahoo group: electrichandbag
Date: 2015-07-01 14:48:55 UTC
From: datatag@...
Topic: 652 Message: 722

I would say that's a fair price for a new FBA-8 battery case, as I paid around £30 for a good second hand one. The previous owner of my FT-290R MkII had kindly ripped all the C-cell contacts out of the battery case and soldered in a 1000mAh battery pack made from nine AA cells and some "gaffer tape"...!!

723. Re: [electrichandbag] Re: FT290 Mk 11

Yahoo group: electrichandbag
Date: 2015-07-01 15:32:27 UTC
From: Peter Brookes
Topic: 652 Message: 723

Look in Maplins, for battery cases, or model shops.
I've replaced mine from maplins

On 1 Jul 2015 12:04 pm, "special@ilizarov.org.uk [electrichandbag]"
<electrichandbag@yahoogroups.com> wrote:

The FBA-8 isn't a battery pack it's simply a case to hold 9 C cells

It doesn't come with any batteries and at £34.94 a piece that seems pretty pricey.

Slim Haines

724. Re: FT290 Mk 11

Yahoo group: electrichandbag
Date: 2015-07-02 00:59:56 UTC
From: jboys1229@...
Topic: 652 Message: 724

Here in the states it seems to be a pretty rare item. The Yaesu 290/690/790 radios seem to be rare here also. That's why I was surprised to find the battery boxes brand new in the packaging. Maybe I paid too much, but when an item is hard to find and in prime shape, I will go ahead and pay the premium. Your mileage may vary. Thanks, John W8BCR.

725. 5 switch tone board

Yahoo group: electrichandbag
Date: 2015-07-02 01:12:33 UTC
From: jboys1229@...
Topic: 725 Message: 725

I just picked up both a FT-690rII and a FT-290rII. The 290 has a tone board that has 5 rocker type DIP switches versus 7 slide DIP switches as the book shows. Do I have a home brew board, or has anyone seen this before? Thanks, John W8BCR

726. Re: 5 switch tone board

Yahoo group: electrichandbag
Date: 2015-07-12 11:33:32 UTC
From: barfield673@...
Topic: 725 Message: 726

Couldnt say for certain, but it sounds like a 3rd party board. If its homebrew, a giveaway would probably be a lack of a silkscreen or conformal coatings, commercial units normally have these (though not always!)

Either way, so long as it gives out usable tones at a usable level, you have an advantage over most of us!

Several years ago, I started setting up to supply little PIC chip based tone kits for the FT-290 - I still have all the parts, never got around to making the PCBs! (I also still owe my supplier for the parts!!!)

728. FT 290R Mk 1 - no mod.

Yahoo group: electrichandbag
Date: 2015-07-23 13:11:18 UTC
From: kt2123@...
Topic: 728 Message: 728

I have an aged FT290 Mk 1 bought from new many years ago, which has developed the following fault. There is no modulation on SSB or FM. In the latter mode it just transmits a blank carrier. If you cycle the mode switch between all its positions several times the mod. comes back on both these modes. But leave the radio alone and the next time when you come to use it the fault may have returned or if your unlucky it may not. The microphone has been checked out and is fine as is its cable.

I have an idea what is causing the problem but I'd like to hear from other members who may have had a similar fault?

73

729. FT290R Mk1 - no modulation

Yahoo group: electrichandbag
Date: 2015-07-23 13:13:45 UTC
From: kt2123@...
Topic: 729 Message: 729

I have an aged FT290 Mk 1 bought from new many years ago, which has developed the following fault. There is no modulation on SSB or FM. In the latter mode it just transmits a blank carrier. If you cycle the mode switch between all its positions several times the mod. comes back on both these modes. But leave the radio alone and the next time when you come to use it the fault may have returned or if your unlucky it may not. The microphone has been checked out and is fine as is its cable.

I have an idea what is causing the problem but I'd like to hear from other members who may have had a similar fault?

73

730. Re: FT290R Mk1 - no modulation

Yahoo group: electrichandbag
Date: 2015-07-23 20:07:13 UTC
From: special@...
Topic: 729 Message: 730

Hi

Whilst not having come across this problem I'd be suspicious of failing electrolytic(s) somewhere in the audio path.
You really need to check the audio path from mic input onwards with an oscilloscope and see if the audio disappears in one of the common sections dealing with the audio prior to both the SSB and FM modulation stages.
Unfortunately I'm no where near any of my schematics and manuals and wont be for quite some time but the fact that it comes and goes is very similar to other capacitor based problems that appear as the rigs age.

73

731. Headset/mic and ptt button

Yahoo group: electrichandbag
Date: 2015-07-23 23:57:40 UTC
From: jboys1229@...
Topic: 731 Message: 731

I'm having real trouble locating original YH-1 headset and SB-10 PTT button. Are there substitutes out there that I can use that any one knows about? Thanks, John W8BCR

732. Re: FT290R Mk1 - no modulation

Yahoo group: electrichandbag
Date: 2015-07-24 08:07:46 UTC
From: kt2123@...
Topic: 729 Message: 732

Okay thanks for your thoughts. I have looked at the cct. diagram and there is no common circuitry following the mic. input. Indeed the mic. output is split via a 0.01uF C, to the FM modulator and via a 1uF to the SSB mod. I guess if the 1uF was leaky it could be upsetting both stages? But I think the jury is still out on that one!?

73

733. FT290RII "B" Model frequency opening

Yahoo group: electrichandbag
Date: 2015-08-18 02:02:02 UTC
From: jboys1229@...
Topic: 733 Message: 733

So here's the saga of my FT experiences. I have acquired two FT690RII's, both with ctcss boards and amplifiers. I have also acquired two FT290RII's, one with an amplifier and the previously posted 5 DIP ctcss tone board, the second one has no amp, is a model 'B', and has the "burst" tone board. Over the next few days my plan is to open the 290's both up, extending the frequency on the "B" from 144-146 to 144-148, and replacing the burst board with an FTS-7 tone board. If successful, I will acquire another ctcss tone board to replace the 5 DIP board in the other 290. This will require rewiring the plug, as some hardwiring was done to the homebrew board. I may take a board from one of the 690's, as 6 meter repeaters around here are few and far between. I'll try and take a few pictures and give a full report, as I would have liked to have seen this information myself. Any pointers would be appreciated! At least the two require work on opposite ends, so I can look back and forth for reference. Stay tuned!
John W8BCR

734. Re: FT290RII "B" Model frequency opening

Yahoo group: electrichandbag
Date: 2015-08-22 03:38:33 UTC
From: jboys1229@...
Topic: 733 Message: 734

1st update. Got the frequency step mod done on the "B" model. It required cutting a jumper. Next step will be to open up frequency range. I believe I will be clipping a resistor and opening the frequency up all the way so I can receive other frequencies. I found the two jumpers I have to move to change the burst tone. It will require desoldering and resoldering. I'll update later.

735. Re: FT290RII "B" Model frequency opening

Yahoo group: electrichandbag
Date: 2015-08-27 01:39:48 UTC
From: jboys1229@...
Topic: 733 Message: 735

I now have the frequency steps done. The snipped jumper took care of that. The frequency range is now opened up also. That was achieved by removal of a resistor. It was about 1/16" wide by 1/8" long. Talk about difficult to find. The frequency diodes and resistors are on the backside of the board that the push buttons are on. I moved two small wire jumpers to change the mode from burst to continuous. The tone board I have is a Piexx after market board. When I key the mike, the repeater opens, but I am having some more issues, because I am getting reports of having heavy noise and my audio is unintelligible. I can hear responses from the repeater just fine, including the one giving me the bad report. I have two of these FT-290RII radios, and the same Piexx tone board doesn't seem to work with either radio. Has anyone got an original tone board they want to get rid of? Have you heard of Piexx boards being questionable? The radios sound really nice talking to each other on FM simplex. SSB sounds like they are a little off frequency. FM simplex good, SSB marginal. Does this indicate an alignment needed? I seem to be raising as many questions as I am solving problems. As for now, I have two great FM simplex sounding radios. I took pictures, which I'll post later. Stay tuned for updates. The good news is that you can convert a 'B' model to an 'A' model. Just gotta solve the tone audio problem!

736. Re: Power Problems?

Yahoo group: electrichandbag
Date: 2015-09-14 09:10:21 UTC
From: yahoo@...
Topic: 374 Message: 736

Hi Gene

I know this borders on necromancy :-)

I'm replacing the M57745 in my FL-7025 and was wondering if you solved your problem, whether it involved a new M57745, and whether you knew if the FL-7025 needs any tuning / setup after replacing the module?

Thanks
Wouter ZS1KE

737. mk1 Carrier Balance fault

Yahoo group: electrichandbag
Date: 2015-10-02 10:13:54 UTC
From: barfield673@...
Topic: 737 Message: 737

I wonder if anyone has come across this before,

On USB only, when I Tx, I have an initial burst of carrier that slowly decays away, but then during the transmission slowly increases again! The presence of this carrier makes QSOs impossible until it reduces. Ive managed a few contacts with it in this state by letting the carrier reduce before speaking, and making the overs short.

I can adjust the carrier balance with VR1001, but it doesnt stop the problem, I just end up chasing the pot around finding a spot which gives me a few moments to make a contact!

I suspect maybe a duff capacitor, but dont understand why the level of this carrier would increase, decrease, increase like this during transmission?

Clearly, when I find and fix whatever is causing it, my carrier balance will be out!

Anyone any ideas?

738. Re: mk1 Carrier Balance fault

Yahoo group: electrichandbag
Date: 2015-10-02 10:58:52 UTC
From: barfield673@...
Topic: 737 Message: 738

As a bit more info. Ive found from the schematics that the carrier balance pot VR1001, which serves both USB and LSB, is part of the circuit around Q1012, and MC1496 chip. As both LSB and USB are common at this chip, and LSB is working fine, my suspicion has fallen on the USB specific parts around the USB carrier crystal X02. Im starting to wonder if the crystal has failed.

I'll get the frequency counter or scope on it and see what its doing, compared with the LSB crystal.

739. Issues

Yahoo group: electrichandbag
Date: 2015-10-05 06:49:00 UTC
From: pa1cjt@...
Topic: 739 Message: 739

Hi all out there, when the FT-290R MK1 came out I bought it directly, sold it and now got an oldie back.
Putting power to it several things are directly observed and I hope that someone or more can advice me before taking it complete apart.

1. SSB seems not te be working
2. FM seems to be working
3. When switched on Power indication is going S9 +++ in the corner
4. When making a call the power indication is going to S0 (rapidly) but signal is received on handheld radio
I've to verify the current consuming what is going on
5. backlight is not working
6. backlight/power check switch shows S9 or S9 +++
7. Memory not working butthat will be and CR2025 replace issue

Probably all of the electrolytes should be replaced but perhaps there are other ideas (everything is welcome incl the directions for that)

Best regards/73's
de Kees
PA1CJT

740. Re: [electrichandbag] Issues

Yahoo group: electrichandbag
Date: 2015-10-05 07:15:26 UTC
From: <special@...>
Topic: 739 Message: 740

That sounds like the standard AGC fault.

Go to this section in the files and carry out the mod detailed
https://groups.yahoo.com/neo/groups/electrichandbag/files/AGC%20FAULT%20MODS/

Slim G4IPZ

----- Original Message -----
From: pa1cjt@... [electrichandbag]
To: electrichandbag@yahoogroups.com
Sent: Monday, October 05, 2015 7:49 AM
Subject: [electrichandbag] Issues

Hi all out there, when the FT-290R MK1 came out I bought it directly, sold it and now got an oldie back.

Putting power to it several things are directly observed and I hope that someone or more can advice me before taking it complete apart.

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2. FM seems to be working

3. When switched on Power indication is going S9 +++ in the corner

4. When making a call the power indication is going to S0 (rapidly) but signal is received on handheld radio

I've to verify the current consuming what is going on

5. backlight is not working

6. backlight/power check switch shows S9 or S9 +++

7. Memory not working butthat will be and CR2025 replace issue

Probably all of the electrolytes should be replaced but perhaps there are other ideas (everything is welcome incl the directions for that)

Best regards/73's

de Kees

PA1CJT

This email has been checked for viruses by Avast antivirus software.
https://www.avast.com/antivirus

741. Re: [electrichandbag] Issues

Yahoo group: electrichandbag
Date: 2015-10-05 07:23:39 UTC
From: PA1CJT (best 73's de Kees)
Topic: 739 Message: 741

Hi Slim,

thx for the answer. I'll look in to it.

best 73's
de Kees
PA1CJT

Op 05-10-15 om 09:15 schreef special@... [electrichandbag]:
>
> □
>
> That sounds like the standard AGC fault.
> Go to this section in the files and carry out the mod detailed
> https://groups.yahoo.com/neo/groups/electrichandbag/files/AGC%20FAULT%20MODS/
> Slim G4IPZ
>
> ----- Original Message -----
> *From:* pa1cjt@... [electrichandbag]
> <mailto:pa1cjt@...%20[electrichandbag]>
> *To:* electrichandbag@yahoogroups.com
> <mailto:electrichandbag@yahoogroups.com>
> *Sent:* Monday, October 05, 2015 7:49 AM
> *Subject:* [electrichandbag] Issues
>
> Hi all out there, when the FT-290R MK1 came out I bought it
> directly, sold it and now got an oldie back.
>
> Putting power to it several things are directly observed and I
> hope that someone or more can advice me before taking it complete
> apart.
>
>
> 1. SSB seems not te be working
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> PA1CJT
>
>
>
> ---
> Avast logo <https://www.avast.com/antivirus>
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> This email has been checked for viruses by Avast antivirus software.
> www.avast.com <https://www.avast.com/antivirus>
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742. Re: [electrichandbag] Issues

Yahoo group: electrichandbag
Date: 2015-10-05 08:26:08 UTC
From: <special@...>
Topic: 739 Message: 742

Hi Kees.

As an addition I have found that sometimes the fault recurs after a year or so and changing the resistor again restores the radio to fully working.

My suspicion (and it is only that) is that the PCB (being very poor quality) can absorb small amounts of moisture which effectively change the component values as I also found that running a hot air gun over the board can also make the radio start working again.

So I am suspicious that the heat from the soldering iron when adding the resistor (or changing it again) dries the board out and the fault clears.

However this heat 'repair' also fails again after several months.
My FT290s (I have several) are all in an outside shack which could explain the moisture problem as they have all had to be got at on more than one occasion.

I have also always thought it odd that this fault only seems to appear on the 290 and never on the 690 (the 790 is a different beast in that area)

This is purely a theory on my part as I have never been able to definitively prove it.

73

Slim

----- Original Message -----
From: 'PA1CJT (best 73's de Kees)' pa1cjt@gmail.com [electrichandbag]
To: electrichandbag@yahoogroups.com
Sent: Monday, October 05, 2015 8:23 AM
Subject: Re: [electrichandbag] Issues

Hi Slim,

thx for the answer. I'll look in to it.

best 73's
de Kees
PA1CJT

Op 05-10-15 om 09:15 schreef special@... [electrichandbag]:

☐

That sounds like the standard AGC fault.

Go to this section in the files and carry out the mod detailed
https://groups.yahoo.com/neo/groups/electrichandbag/files/AGC%20FAULT%20MODS/

Slim G4IPZ

----- Original Message -----
From: pa1cjt@... [electrichandbag]
To: electrichandbag@yahoogroups.com
Sent: Monday, October 05, 2015 7:49 AM
Subject: [electrichandbag] Issues

Hi all out there, when the FT-290R MK1 came out I bought it directly, sold it and now got an oldie back.

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Probably all of the electrolytes should be replaced but perhaps there are other ideas (everything is welcome incl the directions for that)

Best regards/73's

de Kees

PA1CJT

This email has been checked for viruses by Avast antivirus software.
www.avast.com

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https://www.avast.com/antivirus

743. Re: [electrichandbag] Issues

Yahoo group: electrichandbag
Date: 2015-10-05 08:29:04 UTC
From: PA1CJT (best 73's de Kees)
Topic: 739 Message: 743

Hi Slim,

is it possible to replace Q1014 (2sc2603e) for an equivalent type of transistor?
Searching the Internet it seems to be a rare item in the normal stores.

Due to eye problems it is getting difficult to work on/with SMD parts so it will be a puzzle to get it done.

best 73's
de Kees
PA1CJT

Op 05-10-15 om 09:15 schreef special@... [electrichandbag]:
>
> □
>
> That sounds like the standard AGC fault.
> Go to this section in the files and carry out the mod detailed
> https://groups.yahoo.com/neo/groups/electrichandbag/files/AGC%20FAULT%20MODS/
> Slim G4IPZ
>
> ----- Original Message -----
> *From:* pa1cjt@... [electrichandbag]
> <mailto:pa1cjt@...%20[electrichandbag]>
> *To:* electrichandbag@yahoogroups.com
> <mailto:electrichandbag@yahoogroups.com>
> *Sent:* Monday, October 05, 2015 7:49 AM
> *Subject:* [electrichandbag] Issues
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> PA1CJT
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> ---
> Avast logo <https://www.avast.com/antivirus>
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> This email has been checked for viruses by Avast antivirus software.
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744. Disconnected wires in FT290R. Need help identifying where the disconnected from.

Yahoo group: electrichandbag
Date: 2015-10-13 23:15:06 UTC
From: Tony Walsh
Topic: 744 Message: 744
Attachments: 1 described; binary payloads are missing from this source WARC

Folks, any assistance on this problem appreciated. I have an FT290R on which the LCD display was recently replaced. This was a very difficult job and unfortunately several disconnections occurred during the process and I wonder if anybody in the group would have the expertise to help me identify where the disconnected wires go? I attach a photograph which might help with the diagnosis.

1. My first disconnection relates to a plain white wire running from the three back slider switches routed under the battery compartment and emerging beside the fuse-holder. I think this may be for the panel lamp but I am unsure.

2. The second disconnection is of one end of a glass diode. One end is soldered to a pad between the ground strap and the VFO push-button switch on the bottom of the rig. This diode looks like a modification or afterthought. It could possibly be disconnected from the first pin (on the left) on the ten-pin plug along with the green/white wire as the plastic is slightly melted at this point as can be seen from the attached photograph. However, I cannot be sure of this.

3. There is a thirteen-pin plug just behind the ten-pin one and there are two problems here. The fourth pin from the left looks as if there originally was a black/white wire connected and that it was possibly purposely cut. The reason I think that is that an unconnected black/white wire is in the vicinity and it looks like a very short stub of the same colour is still soldered to the fourth pin from the left.

4. There is a maroon/white wire connected to the third pin from the left of the thirteen pin plug but the other end is free and not connected anywhere. I have no idea where this should be connected to or if it should be left unconnected?

I would hate to have to scrap the rig on accound of not knowing where these unconnected/disconnected wires go. Therefore I am appealing for help through this Group.

Best 73 de Tony (EI5EM)

745. FT290 MK1 doing a "boing" when you first key the mike.

Yahoo group: electrichandbag
Date: 2015-10-14 08:02:22 UTC
From: rick.g6uzt@...
Topic: 745 Message: 745

Chaps.

My beloved 290 has a strange "Boing" when you first key the mike on FM (not sure about SSB).
This can be heard at the receiving end and is quite noticeable.
The radio has gone through the workshops and been set up correctly (according to the manual).
Any suggestions?

Rick.
DE G6UZT.

746. Re: Disconnected wires in FT290R. Need help identifying where the disconnected from.

Yahoo group: electrichandbag
Date: 2015-10-14 09:45:03 UTC
From: barfield673@...
Topic: 744 Message: 746

My mk1 is open at the moment for repair, i'll photograph the same view as yours and post it up for you to compare with shortly

Regards
Martin

747. Re: FT290 MK1 doing a "boing" when you first key the mike.

Yahoo group: electrichandbag
Date: 2015-10-14 09:47:09 UTC
From: barfield673@...
Topic: 745 Message: 747

Can you check on SSB? USB in particular

These sets do have a bit of a 'feature' on SSB at least that theres a few dozen milliseconds of unbalanced carrier at key up. Mine has developed a fault where this doesnt go away though!

Its possible the same thing is occuring on FM on your set, so it would be interesting to compare,

Its easy to see on SSB as the meter needle doesnt drop all the way back to zero

748. Re: Disconnected wires in FT290R. Need help identifying where the disconnected from.

Yahoo group: electrichandbag
Date: 2015-10-14 12:57:56 UTC
From: barfield673@...
Topic: 744 Message: 748
Attachments: 3 described; binary payloads are missing from this source WARC

Tony,

Attached are photos of these sections in my mk1. They might be able to help you identify where the wires go,

not sure at all of the diode!

Martin

749. Re: FT290 MK1 doing a "boing" when you first key the mike.

Yahoo group: electrichandbag
Date: 2015-10-14 18:14:21 UTC
From: rick.g6uzt@...
Topic: 745 Message: 749

Evening chap. Just checked, but the needle stays planted on 0 on SSB.
I can't test the output on ssb at the moment, I don't have a means of listening to it with me.
I'll pop it over to the test gear in the week and let you know.
Cheers.
Rick.

750. Re: [electrichandbag] Re: Disconnected wires in FT290R. Need help identifying where the disconnected from. [3 Attachments]

Yahoo group: electrichandbag
Date: 2015-10-16 23:49:26 UTC
From: Tony Walsh
Topic: 744 Message: 750

Many thanks Martin,
I really appreciate it. i will let you know how I fare out.

Tony

----- Original Message -----
From: "electrichandbag" <electrichandbag@yahoogroups.com>
To: "electrichandbag" <electrichandbag@yahoogroups.com>
Sent: Wednesday, 14 October, 2015 13:57:56
Subject: [electrichandbag] Re: Disconnected wires in FT290R. Need help identifying where the disconnected from. [3 Attachments]

Tony,

Attached are photos of these sections in my mk1. They might be able to help you identify where the wires go,

not sure at all of the diode!

Martin

751. For Sale FT290 MK1 UK Only

Yahoo group: electrichandbag
Date: 2015-10-18 13:59:54 UTC
From: g8xlh@...
Topic: 751 Message: 751

Hi all,

I have an FT290 I no longer use.

It does not have a Mutek or CTCSS Board

The battery compartment is clean and Dry Cells are fitted.

No charger supplied

The internal antenna is missing, but I have made up a length of coax to simulate the original retracted antenna, and stored in the antenna tube. The end of the antenna tube at the front panel has been covered up with a circular piece of plastic.

You now have only the rear socket working.

Looking for £50 plus postage/meet up in UK.

email me at g8xlh"at"ntlworld.com

replace "at" with @

Regards

Alan

752. Re: Finer FM frequency steps for the FT-790RII

Yahoo group: electrichandbag
Date: 2015-10-19 19:35:06 UTC
From: jameshickox@...
Topic: 548 Message: 752

Hello,
Has anyone been able to get the FM steps even smaller? I would like to be able to tune in 1 KHz steps if possible.

Thanks,
James Hickox
AA5AO

753. Re: For Sale FT290 MK1 UK Only

Yahoo group: electrichandbag
Date: 2015-10-20 13:31:00 UTC
From: g8xlh@...
Topic: 751 Message: 753

Hi All Now Sold

754. Re: Finer FM frequency steps for the FT-790RII

Yahoo group: electrichandbag
Date: 2015-10-20 17:11:04 UTC
From: stan@...
Topic: 548 Message: 754

Whenever I needed to do this, (rarely), I just switched to SSB, tuned, and switched back to FM...

HTH,

73 de Stan, G4EGH

757. Handling Spam posts - Was - Re: (no subject)

Yahoo group: electrichandbag
Date: 2015-10-31 12:37:26 UTC
From: barfield673@...
Topic: 756 Message: 757

All,

When a post occurs that is likely to be spam, please DO NOT replay to it either on the group or directly. Spam WILL NOT BE TOLERATED. But please do not confound it by replying to it.

Anyone whose account is the source of spam will be placed back on moderation, until such time as the group owner (myself) is satisfied their posts are clean. Should spamming re-occur, or the posts not stop, that account may be subject to instant banning.

758. FT-690Rii No T

Yahoo group: electrichandbag
Date: 2016-01-26 13:07:18 UTC
From: jefff@...
Topic: 758 Message: 758

I know this isn't a 690 group, but due to the similarities to the 290, I'm hoping someone can help. I recently acquired a 690Rii, that has a problem. It has the 6020 linear on the rear. The radio was working fine, and had 12 watts out on high, and about 2.5 watts on low. All of a sudden, the radio quit transmitting. I remove the linear, and the radio itself has no output. The funny thing is, the ON AIR (red) LED doesn't even come on. When I key the mike, the RX cuts off, but no output and no TX LED. I tried another mike, same result. It even varies the green busy LED when I talk into the mike on SSB, but no TX LED, and no output. One day it works, next it doesn't. I was hoping someone could point me where to start looking.

Thanks & 73,
Jeff
K4LMP

759. Re: [electrichandbag] FT-690Rii No T

Yahoo group: electrichandbag
Date: 2016-01-27 08:08:31 UTC
From: telemech46@...
Topic: 758 Message: 759

Hi Jeff,

The PA transistor may have blown. It's not an uncommon problem on the 2m version.

Regards

Neil

On 26 Jan 2016 13:07, "jefff@MOUNET.COM [electrichandbag]"
<electrichandbag@yahoogroups.com> wrote:

I know this isn't a 690 group, but due to the similarities to the 290, I'm hoping someone can help. I recently acquired a 690Rii, that has a problem. It has the 6020 linear on the rear. The radio was working fine, and had 12 watts out on high, and about 2.5 watts on low. All of a sudden, the radio quit transmitting. I remove the linear, and the radio itself has no output. The funny thing is, the ON AIR (red) LED doesn't even come on. When I key the mike, the RX cuts off, but no output and no TX LED. I tried another mike, same result. It even varies the green busy LED when I talk into the mike on SSB, but no TX LED, and no output. One day it works, next it doesn't. I was hoping someone could point me where to start looking.

Thanks & 73,
Jeff
K4LMP

760. Re: [electrichandbag] FT-690Rii No T

Yahoo group: electrichandbag
Date: 2016-01-27 13:06:10 UTC
From: jefff@...
Topic: 758 Message: 760

I thought about that. Do you think that would cause the red "on air" LED to not light up, when the mike is keyed? That is what puzzles me. I opened the radio up last night, and looked for anything loose or broken and found nothing.

Thanks,
Jeff
K4LMP

761. Re[2]: [electrichandbag] FT-690Rii No T

Yahoo group: electrichandbag
Date: 2016-01-27 13:22:03 UTC
From: john.pagett@...
Topic: 758 Message: 761

I wonder if the synth is losing lock on transmit. That may explain the led not coming on.
John
G4YTJ
--
Sent from myMail app for Android Wednesday, 27 January 2016, 01:06PM +0000 from "jefff@MOUNET.COM [electrichandbag]" < electrichandbag@yahoogroups.com> :

>
>I thought about that. Do you think that would cause the red "on air" LED to not light up, when the mike is keyed? That is what puzzles me. I opened the radio up last night, and looked for anything loose or broken and found nothing.
>
>Thanks,
>Jeff
>K4LMP
>

762. Re: FT-690Rii No T

Yahoo group: electrichandbag
Date: 2016-01-27 13:38:40 UTC
From: jefff@...
Topic: 758 Message: 762

I'm not sure. I have a couple of 100 Mhz scopes. I wouldn't begin to know where to look, though. The display shows the correct frequency on TX, and if it is set to + or - offset, it even switches to the correct frequency on TX. Thank you so much!

763. mk1 will not work on internal batteries

Yahoo group: electrichandbag
Date: 2016-02-11 21:58:31 UTC
From: barfield673@...
Topic: 763 Message: 763

Hi All,

Ok, im a little stumped on this one!

Im dealing with a 290 mk1, which will work perfectly on external supply, but not on internal batteries at all. In fact, turning the set on with the batteries in actually shorts them out! I can even watch the voltage of the pack recover after turning the set off again!

Its not the cells, they are fine in one of my other 290s, and neither is it as I initially suspected just high contact resistance in the old battery holders - ive changed the whole battery tray for the recently refurbished one from my other set.

As the radio works ok on external power, im suspecting an issue with the power socket, or parts around it. Has anyone seen this mode of failure before?

All the diodes on the socket test out fine, which leaves the capacitors or the socket itself

764. Re: mk1 will not work on internal batteries

Yahoo group: electrichandbag
Date: 2016-02-11 22:14:14 UTC
From: barfield673@...
Topic: 763 Message: 764

Oh, never mind! Answered my own question a few minutes after posting!

I decided to plug in the external power lead, without it connected to a PSU, to take some continuity measurements. I then waggled it about a bit in the socket -

and it started working on battery when I took the plug out!

So, it is, after all, a dicky switch contact inside the socket!

I'll give it a blast of servisol later and a good exercising with the plug in it

765. AGC fault - possible cure found?

Yahoo group: electrichandbag
Date: 2016-02-29 19:18:12 UTC
From: g8vhl@...
Topic: 765 Message: 765

Lots have been said and written about the now classic AGC fault on the FT-290. One of the proposed causes of the fault was said to be moisture absorption by the pcb. Like many people, I found the AGC fault on my 290 could be reduced by heating with a hairdryer, although this did not differentiate between driving some moisture from the pcb, or simply warming the components. So I decided to try an experiment.
I had a small dehumidifier, basically a plastic box with a heating element (resistor) mounted on a metal plate and surrounded by approx 1/2 Litre of Silica Gel. An indicator strip changed from blue to pink when the unit was saturated and needed drying out. The heater was only used to dry out the silica gel.
I removed the top and bottom covers and the battery compartment from the rig and put it into a large, clear zip-lock plastic bag along with the dehumidifier and a small thermo hygrometer, squeezing out as much air as I could, and folded the bag to try and stop fresh, moist air from re-entering.
I set the whole lot aside and occasionally monitored the temperature and humidity, which varied between 16 and 20 deg C and 7 to 9 percent RH.
After 6 weeks I decided to give the rig a try and found that the fault had gone.
Two weeks later and there is still no sign of it returning, but whether it is a permanent cure remains to be seen. I am thinking of putting some small packets of silica gel inside the rig should the fault recur.

766. Re: AGC fault - possible cure found?

Yahoo group: electrichandbag
Date: 2016-03-01 11:48:15 UTC
From: barfield673@...
Topic: 765 Message: 766

Thats a very interesting result!

Most military radios contain dessicant cartridges, so it would make sense to keep any moisture out of the system.

Silica gel packs can be obtained from the Far East for pennies, it has to be worth a try. Even if adding a few doesnt work in every case, theyre not going to harm anything being in there

767. FT290R

Yahoo group: electrichandbag
Date: 2016-03-11 14:20:02 UTC
From: buz90a@...
Topic: 767 Message: 767

Hi Guys, Just hot off EBay, I got a FT290R that had about 20Volts instead of 13.8Volts, would the best place to check (as there is a low load resistance between deck and +13.8v rail), would the RF o/p Transistor be checked for low resistance, and maybe other trannies similar. I suppose the decoupling electrolytics also would be worth checking. I have the circuit diagram for it. I also got a 'Donor' set but you don't really know how good it is..!
73's for now
Bernard GI4HDJ

768. FS: FT-290 mk1 and FT-790 mk1

Yahoo group: electrichandbag
Date: 2016-03-11 17:56:56 UTC
From: Pencoys
Topic: 768 Message: 768

Hi Folks,
located in the UK and would prefer selling in the UK but may concider EU destinations.

Both sets are working, but have been stored in a dry cupboard for a few years.
only one microphone and that has a perished cable.
I cannot offer a guarentee due to their age, but both fire up and the LCD's are not bleeding.
looking for about £120 for the pair, may concider spliting if nessesary.
cheers, Mike G8NXD qthr

769. Re: FT290R

Yahoo group: electrichandbag
Date: 2016-03-11 19:15:41 UTC
From: stan@...
Topic: 767 Message: 769

"Hi Guys, Just hot off EBay, I got a FT290R that had about 20Volts instead of 13.8Volts, would the best place to check (as there is a low load resistance between deck and +13.8v rail), would the RF o/p Transistor be checked for low resistance, and maybe other trannies similar."

Had one once that had a similar;ar fate. Only the output tranny went west.... (I think it was a 2SC1947).

73 de Stan, G4EGH

770. Re: [electrichandbag] Re: FT290R

Yahoo group: electrichandbag
Date: 2016-03-12 00:14:18 UTC
From: Bernard Mc Garry
Topic: 767 Message: 770

Thanks for the info, and 73's from Bernard GI4HDJ

On Friday, 11 March 2016, 19:15, "stan@... [electrichandbag]"
<electrichandbag@yahoogroups.com> wrote:

"Hi Guys, Just hot off EBay, I got a FT290R that had about 20Volts instead of 13.8Volts, would the best place to check (as there is a low load resistance between deck and +13.8v rail), would the RF o/p Transistor be checked for low resistance, and maybe other trannies similar."
Had one once that had a similar;ar fate. Only the output tranny went west.... (I think it was a 2SC1947).
73 de Stan, G4EGH

771. Re: FS: FT-290 mk1 and FT-790 mk1

Yahoo group: electrichandbag
Date: 2016-03-13 09:34:28 UTC
From: iw1au@...
Topic: 768 Message: 771

Hi Mike!
I would be potentially interested to FT-790 only; may you contact me at iw1au@yahoo.it?
Thanks.
Gian, IW1AU

772. Squelch Drift

Yahoo group: electrichandbag
Date: 2016-06-12 10:24:41 UTC
From: Bernard Mc Garry
Topic: 772 Message: 772

Hi Guys,
My FT290 mk1, has (to me anyway) an unusual fault. When I set the squelch to say one 0 clock position (enough to silence the white noise). After about 10 mins. the white noise opens up the squelch up and the knob has to be increased further clockwise to silence the noise, then you run out of squelch. I have changed both diode D32 and electrolytic C97 around the Squelch chip Q1019, but the fault remains.I have just read on this group about a common AGC fault linked into the possible PCB moisture absorbition, as the 290 in question is comparitivity old, could this be the 'drift' problem?
Thanks in advance
Bernard GI4HDJ

773. Regulator Board PB-2239

Yahoo group: electrichandbag
Date: 2016-06-14 09:42:17 UTC
From: gi0gdp@...
Topic: 773 Message: 773

I have just replaced the memory back up Lithium cell after 30 years (didn't last long!).
Put the Reg board back in and nothing came on.
Got the handbook and circuits out and here if there was NO ICL7660 on my board.
The -6v8 is generated the old way, however i think i have looked at all the circuits in the files section
and none show this but only the ICL7660 version, so does anyone have a copy of the circuit that they can put into the files section.
regards
Geoff
GI0GDP

774. Re: AGC fault - possible cure found?

Yahoo group: electrichandbag
Date: 2016-06-14 13:24:10 UTC
From: buz90a@...
Topic: 765 Message: 774

I also was having a weird problem with my squelch setting 'drifting'. It would be fine initial setting when first turned on, but about 7 mins later, it had to be increased clockwise, eventually it was fully clockwise, which wasn't enough. Cooling the components around the squelch chip made no difference, I changed both Diode D32 and electrolytic C97, still no difference, so maybe if I check out the 'humidity' problem, it might work!

Bernard GI4HDJ

775. FT290 mk1

Yahoo group: electrichandbag
Date: 2016-06-16 14:41:50 UTC
From: Bernard Mc Garry
Topic: 775 Message: 775

Hi Guys'
The radio set came to me as one that had 20V DC applied to it, as the 13.5V supply wen't faulty. I replaced the PA o/p transistor with a new 2SC1947 (Mitsubushi), but when I transmit, the transceiver takes 2 Amps, and begins 'thrermal runnaway' with the heatsink getting hot. The DC gain of the transistor. Has the PA load inductors have to be tuned or some other adjustment have to be made when a new PA transistor is replaced, as I don't wish to burn it out?
Cheers
Bernard GI4HDJ

777. Re: FT290 mk1

Yahoo group: electrichandbag
Date: 2016-06-19 09:48:54 UTC
From: gi0gdp@...
Topic: 775 Message: 777

HI Bernard,
Second attempt at a reply, there is a bias pot fitted on my 290 close to the radial finned heatsink on the output transistor.
You will need turn this right down and then select SSB and slowly increase for say a 20-25mA increase on Tx..
Or break into the collector of the device and set the current that way.
regards
Geoff
GI0GDP
If your set doesn't have the pot then you will need to and a resistor from R71 to ground to reduce the standing current, or if you want add resistance to R70 but the first way is easier.

778. Re: [electrichandbag] Re: FT290 mk1

Yahoo group: electrichandbag
Date: 2016-06-19 15:59:00 UTC
From: Bernard Mc Garry
Topic: 775 Message: 778

I see the bias pot now, so that's a great help, as I must be using an older schematic as it's not in it..important point is it's on the pcb!
Many thanks73'sBernard

From: "gi0gdp@... [electrichandbag]" <electrichandbag@yahoogroups.com>
To: electrichandbag@yahoogroups.com
Sent: Sunday, 19 June 2016, 10:48
Subject: [electrichandbag] Re: FT290 mk1

HI Bernard,
Second attempt at a reply, there is a bias pot fitted on my 290 close to the radial finned heatsink on the output transistor.
You will need turn this right down and then select SSB and slowly increase for say a 20-25mA increase on Tx..
Or break into the collector of the device and set the current that way.
regards
Geoff
GI0GDP
If your set doesn't have the pot then you will need to and a resistor from R71 to ground to reduce the standing current, or if you want add resistance to R70 but the first way is easier.

779. Re: [electrichandbag] Re: FT290 mk1

Yahoo group: electrichandbag
Date: 2016-06-20 18:59:23 UTC
From: stan@...
Topic: 775 Message: 779

I may be wrong, but it is worth a check. I seem to recall there was a diode that was part of the bias circuit. The idea being that when the PA got hot, the diode (physically attached to it) also got hot, and dropped the PA bias a bit.

If the collector-base junction was blown short by the excessive voltage on the old transistor, the diode could have "copped it" as well. If that went open circuit, as well then all bias control is lost. I seem to recall making PA bias adjustments on the pot, and it never got as high as 2 amps.

HTH,

73 de Stan, G4EGH

780. Re: [electrichandbag] Re: FT290 mk1

Yahoo group: electrichandbag
Date: 2016-06-24 09:39:57 UTC
From: Bernard Mc Garry
Topic: 775 Message: 780

Hi Geoff, and other people who gave helpful advice,I discovered yes there is a bias pot right beside the heatsink, but as the set was subject to overvoltage which required me to replace the pa transistor, I discovered that the diode ground path, which 'shunts the PA base to Gnd' was o/c as the cathode (ringed end) of the diode is not actually soldered to the pcb, rather it is soldered to the top of the can of the pa transistor, which via the heatsink is grounded, and I didn't notice this untill I had replaced the transistor and traced the circuit. Luckily I clamped it below the clamping bolt washer and now the current is now within normal limits...phew what a job trying to trace the ground path. I didn't expect the manufacturers to use such a method, but maybe it was a more direct rf path to stop parasitic oscillation, or whatever!!
Thanks to everyone for your help, it's deeply appreciated, as I thought I was on my own here !!73sBernard GI4HDJ

From: "gi0gdp@... [electrichandbag]" <electrichandbag@yahoogroups.com>
To: electrichandbag@yahoogroups.com
Sent: Sunday, 19 June 2016, 10:48
Subject: [electrichandbag] Re: FT290 mk1

  HI Bernard,
Second attempt at a reply, there is a bias pot fitted on my 290 close to the radial finned heatsink on the output transistor.
You will need turn this right down and then select SSB and slowly increase for say a 20-25mA increase on Tx..
Or break into the collector of the device and set the current that way.
regards
Geoff
GI0GDP
If your set doesn't have the pot then you will need to and a resistor from R71 to ground to reduce the standing current, or if you want add resistance to R70 but the first way is easier.

781. Re: [electrichandbag] Re: FT290 mk1

Yahoo group: electrichandbag
Date: 2016-06-24 21:18:06 UTC
From: stan@...
Topic: 775 Message: 781

Hi Bernard,

The diode is soldered to the PA case to get as much thermal contact with the transistor as possible. It is important this is done, because as soon as the transistor heats up, the diode heats up, and it reduces its voltage across it by 2 mV per degree C. This starts to shunt away the transistor bias, preventing thermal runaway.

By doing what you have done, you will probably never get the diode anywhere near the temperature of the transistor, and thermal runaway remains a possibility. The fact that you had around 2 amps of collector current without the diode shows that it has a "rather large" influence on things....

Remove the heatsink, leaving the transistor in place. Scrape the top of the transistor case, and with a very hot iron QUICKLY tin it. Aim for no more than one second of contact, iron to transistor. DO NOT have the heatsink in place when you do this, as you will then need to apply the iron for much longer to get the solder to melt, possibly damaging the transistor.

Replace the heatsink, align the diode, and again, with a hot iron, a very quick "dab" to solder the diode.

Then place a "dob" of heatsink paste on the diode in such a way as to get the maximum possible thermal contact between the transistor case, and the diode body. Remember that the diode needs to make contact with the transistor case, as the heatsink runs cooler.

In the early 1980's this was a common way to provide thermal runaway, but it was not the best way to bias the transistor. Linearity was compromised a little, but it was cheap and effective. You could get acceptable performance from a low power stage, such as the FT290 PA.

Happy "FT290'ing!

73 de Stan, G4EGH

782. Re: [electrichandbag] Re: FT290 mk1

Yahoo group: electrichandbag
Date: 2016-06-25 06:18:20 UTC
From: Bernard Mc Garry
Topic: 775 Message: 782

Hi Stan,
Thanks for this tip. I am still using the original diode, but I just grounded it on copper heatsink, so I'm glad you pointed it out, great Thanks
73's Bernard GI4HDJPS I notice our callsigns aren't far apart!!

From: "stan@... [electrichandbag]" <electrichandbag@yahoogroups.com>
To: electrichandbag@yahoogroups.com
Sent: Friday, 24 June 2016, 22:18
Subject: Re: [electrichandbag] Re: FT290 mk1

Hi Bernard,
The diode is soldered to the PA case to get as much thermal contact with the transistor as possible. It is important this is done, because as soon as the transistor heats up, the diode heats up, and it reduces its voltage across it by 2 mV per degree C. This starts to shunt away the transistor bias, preventing thermal runaway.
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In the early 1980's this was a common way to provide thermal runaway, but it was not the best way to bias the transistor. Linearity was compromised a little, but it was cheap and effective. You could get acceptable performance from a low power stage, such as the FT290 PA.
Happy "FT290'ing!
73 de Stan, G4EGH

783. Re: [electrichandbag] Re: FT290 mk1 Heatsinking

Yahoo group: electrichandbag
Date: 2016-06-26 17:21:19 UTC
From: stan@...
Topic: 775 Message: 783

Hi Bernard,

Glad to have helped. The FT290 was not my first radio, but it remains a favourite. Yes, that was a while back, and yes, our calls are close, Hi. Still got any hair? :-) :-)

73 de Stan, G4EGH

784. Alignment Instructions for 790RII

Yahoo group: electrichandbag
Date: 2016-09-18 20:59:26 UTC
From: Dave Wood
Topic: 784 Message: 784

Anyone on the group have the frequency alignment instructions for the 790RII? All I can find is some fuzzy copies of the schematic. Mine is off frequency and needs some minor tweeks. Thanks Dave

785. RE: Alignement Instructions for 790RII

Yahoo group: electrichandbag
Date: 2016-09-19 12:14:36 UTC
From: Robert Wilkinson
Topic: 785 Message: 785

Hi Dave,

Presume you have tried the Mods.DK web site?
They list the schematic for the Yaesu FT-790RII. I downloaded the technical supplement for the FT-290RII when I needed to work on one and see that as quite good copy. Failing sourcing the correct Technical supplement, possibly the 2m version can give some idea how to approach your problem?

Just an idea.

Regards,
Bob, G3VVT

---

1. Alignment Instructions for 790RII
Posted by: "Dave Wood" w4ej15@... w4ej31
Date: Sun Sep 18, 2016 1:59 pm ((PDT))

Anyone on the group have the frequency alignment instructions for the 790RII? All I can find is some fuzzy copies of the schematic. Mine is off frequency and needs some minor tweeks. Thanks Dave

Messages in this topic (1)

787. Simple radio test advice

Yahoo group: electrichandbag
Date: 2016-11-10 20:43:02 UTC
From: josepoyanuk@...
Topic: 787 Message: 787

Hi,

I just bought a FT-290 mark 1 from eBay, and the seller gave me a classic: "it belonged to someone who took care of it. It is fully working"

I only have another VHF radio to test it now that it has arrived to me and I know, at least, that it powers up. It came with batteries.

Could someone please give me some points of advice in how to identify any fault the radio may have? A small list of quick tests that I could do, anything that comes to your mind, will help me a lot.

Thank you in advance.

788. Re: [electrichandbag] Simple radio test advice

Yahoo group: electrichandbag
Date: 2016-11-10 21:29:29 UTC
From: <special@...>
Topic: 787 Message: 788

Hi

The simple answer is to fire it up and see if it works.

Unless you have a fully equipped workshop and can (or want to) run through a full alignment and test routine, then powering it up and operating it is the simplest way.

Use a dummy load instead of an antenna if you're doubtful about anything especially on the transmit side.

The user guide can be found in many places on the web if yours came without one.

Slim G4IPZ

----- Original Message -----
From: josepoyanuk@... [electrichandbag]
To: electrichandbag@yahoogroups.com
Sent: Thursday, November 10, 2016 8:43 PM
Subject: [electrichandbag] Simple radio test advice

Hi,

I just bought a FT-290 mark 1 from eBay, and the seller gave me a classic: "it belonged to someone who took care of it. It is fully working"

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Thank you in advance.

This email has been checked for viruses by Avast antivirus software.
https://www.avast.com/antivirus

789. Re: [electrichandbag] Simple radio test advice

Yahoo group: electrichandbag
Date: 2016-11-10 21:40:18 UTC
From: ian
Topic: 787 Message: 789

Simple things like see if recieves one the Beacons if you within range such as GB3VHF, transmit into a dummy load with a power meter in circuit to check output. Otherwise like Slim says unless you have test kit not a lot else you can do without actually trying it

Ian

2E0IJH

Sent: Thursday, November 10, 2016 at 9:29 PM
From: "special@... [electrichandbag]"
To: electrichandbag@yahoogroups.com
Subject: Re: [electrichandbag] Simple radio test advice

☐

Hi

The simple answer is to fire it up and see if it works.

Unless you have a fully equipped workshop and can (or want to) run through a full alignment and test routine, then powering it up and operating it is the simplest way.

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From: josepoyanuk@... [electrichandbag]

To: electrichandbag@yahoogroups.com

Sent: Thursday, November 10, 2016 8:43 PM

Subject: [electrichandbag] Simple radio test advice

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will help me a lot.

Thank you in advance.

(https://www.avast.com/antivirus)

This email has been checked for viruses by Avast antivirus software.
www.avast.com (https://www.avast.com/antivirus)

790. Re: Simple radio test advice

Yahoo group: electrichandbag
Date: 2016-11-12 14:17:38 UTC
From: josepoyanuk@...
Topic: 787 Message: 790

Thank you for the advice,

I have tried what you both advised me and the radio works on that side. I picked up a signal from someone taking, and I tested for transition-reception with my handheld Icom. I've got the user manual too but I did not find anything useful apart from learning how it works.

What baffles me is that the step options are 12.5 and 25 kHz whereas the manual says that they are 5 and 10 KHz.
Another thing that I noticed is that the squelch does not work at all in CW, USB or LSB. It is permanently opened in those band.
Does anyone know why is it like that, please?

791. Re: [electrichandbag] Simple radio test advice

Yahoo group: electrichandbag
Date: 2016-11-12 14:45:06 UTC
From: ian
Topic: 787 Message: 791

For the Uk, 12.5 and 25 knhz spacing is correct. 5 and 10 is other parts of the world You need a Uk Manual and squelch only work in FM, thats normal

Ian

2E0IJH

Sent: Saturday, November 12, 2016 at 2:17 PM
From: "josepoyanuk@... [electrichandbag]"
To: electrichandbag@yahoogroups.com
Subject: [electrichandbag] Re: Simple radio test advice

Thank you for the advice,

I have tried what you both advised me and the radio works on that side. I picked up a signal from someone taking, and I tested for transition-reception with my handheld Icom.

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Another thing that I noticed is that the squelch does not work at all in CW, USB or LSB. It is permanently opened in those band.

Does anyone know why is it like that, please?

792. Re: Simple radio test advice

Yahoo group: electrichandbag
Date: 2016-11-12 22:41:14 UTC
From: josepoyanuk@...
Topic: 787 Message: 792

ok Ian. thank you!

793. Re: Simple radio test advice

Yahoo group: electrichandbag
Date: 2016-11-12 23:16:21 UTC
From: josepoyanuk@...
Topic: 787 Message: 793

There is something that I dont understand. The beacon is in 144.430 but with 12.5 and 25 kHz step, it is not possible to set that frequency. I can hear the beacon but it is offset. Then what is the point for those steps? Should I try to change my radio to 5 and 10KHz?

794. Re: [electrichandbag] Simple radio test advice

Yahoo group: electrichandbag
Date: 2016-11-12 23:24:34 UTC
From: ian
Topic: 787 Message: 794

The steps only apply to FM, when in ssb or CW, you will have fine tuning, GB3VHF is 144.430 CW as it transmits a CW tone.

We use 12.5kc channels in FM starting at 145.000, we used to use 25kc channels the old s1-s20 channel numbers

On 144mhz the SSB/CW part of the band we do not use channels it's fine tuning, so when on 144mhz put the rig in ssb or cw dpending on whether you listening for voice or CW, the SSB calling freq is 144.300.

When on 145mhz you want to be in FM.

Do you have a Licence or in training as this is basic Foundation level stuff?

Ian

2E0IJH

Sent: Saturday, November 12, 2016 at 11:16 PM
From: "josepoyanuk@... [electrichandbag]"
To: electrichandbag@yahoogroups.com
Subject: [electrichandbag] Re: Simple radio test advice

There is something that I dont understand. The beacon is in 144.430 but with 12.5 and 25 kHz step, it is not possible to set that frequency. I can hear the beacon but it is offset. Then what is the point for those steps? Should I try to change my radio to 5 and 10KHz?

795. Re: Simple radio test advice

Yahoo group: electrichandbag
Date: 2016-11-13 09:30:11 UTC
From: josepoyanuk@...
Topic: 787 Message: 795

I think I understand a bit now. The fine tuning allowed me to correct the frequency to the beacon one but this is only for reception, and the radio will transmit in the step frequency. Anyway I am not transmitting for now, and it was only for testing.

I am studying for the Foundation license. The radios I have are for my collection, specially vintage radios, but I now want start using some of them, so I will get the foundation first.
Thank you,
jose

796. Re: [electrichandbag] Simple radio test advice

Yahoo group: electrichandbag
Date: 2016-11-13 09:49:16 UTC
From: ian
Topic: 787 Message: 796

No The radio will transmit on what frequency you have displayed, Suggest you read up in the Foundation book the differences between FM and SSB operation.

for SSB and CW operation you use fine tuning 1kc at a time for FM Operation you use channels 12,5kc or 25kc apart.

This is a good online version of foundation training and might help,
http://www.brats-qth.org/training/flc/index.htm

Ian

2E0IJH

Sent: Sunday, November 13, 2016 at 9:30 AM
From: "josepoyanuk@... [electrichandbag]"
To: electrichandbag@yahoogroups.com
Subject: [electrichandbag] Re: Simple radio test advice

I think I understand a bit now. The fine tuning allowed me to correct the frequency to the beacon one but this is only for reception, and the radio will transmit in the step frequency. Anyway I am not transmitting for now, and it was only for testing.

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Thank you,

jose

797. Re: [electrichandbag] Simple radio test advice

Yahoo group: electrichandbag
Date: 2016-11-13 23:37:22 UTC
From: stan@...
Topic: 787 Message: 797

Of course..... Switching to FM and having a rapid QSY to near where you wish to be on SSB, and then switching to SSB to get initially 1kHz steps, and then fine tuning on 100Hz steps is the way to go.

I don't think the OP was necessarily confused with the modes, maybe just a lack of detailed knowledge of the radio he got hold of... And for what it is worth, I just modified mine, and then, having had it for 35 years, I had to read the book.....

73 de Stan, G4EGH

798. Re: Simple radio test advice

Yahoo group: electrichandbag
Date: 2016-11-14 23:57:36 UTC
From: josepoyanuk@...
Topic: 787 Message: 798

Thanks for all the help. Yes, the link is useful. The Foundation Booklet I have is just a magazine and I will need more than that. So I will use this and other links

Great ! I can now also change 1kHz in FM. I have it working, thank you! Now I need a License :-)

799. Replacing the Display on an FT290R

Yahoo group: electrichandbag
Date: 2016-11-15 10:41:06 UTC
From: dave.g8gkq@...
Topic: 799 Message: 799

I have written an article for the December 2016 RadCom (pp 60-61) on fitting a replacement display to the FT290R. I'd be interested to know if anyone else builds the design.

Whilst I cannot provide copies of the article (you'll need to borrow a friend's RadCom or join the RSGB), I'm happy to provide advice if anyone has trouble in reproducing the design.

In brief, I use a PIC (which fits in battery compartment) to decode the data going to the old (failed) LCD display and drive a miniature LED display fitted in its place.

Dave, G8GKQ

800. Re: Replacing the Display on an FT290R

Yahoo group: electrichandbag
Date: 2016-11-15 12:25:36 UTC
From: barfield673@...
Topic: 799 Message: 800

Hi Dave,

I was quite interested when I saw your article, would you be able to upload the circuit diagrams and firmware file to the groups files section?

I was planning on emailing you but you've beat me to it!

Its great to see a group member solving the issues we have with these radios as they age. If only we could find a definitive cure for the AGC issue!

Regards
Martin G7MRV
Group Owner

801. Re: Replacing the Display on an FT290R

Yahoo group: electrichandbag
Date: 2016-11-15 16:39:56 UTC
From: dave.g8gkq@...
Topic: 799 Message: 801

Hi Martin

The firmware (assembler and hex) is on the public RadCom website at RadCom downloads - Radio Society of Great Britain - Main Site : Radio Society of Great Britain – Main Site http://rsgb.org/main/publications-archives/radcom/supplementary-information/radcom-downloads/

RadCom downloads - Radio Society of Great Britain - Main Site : Radio Society of Great Britain... http://rsgb.org/main/publications-archives/radcom/supplementary-information/radcom-downloads/ RadCom downloads This page contains downloadable files to support RadCom articles RadCom download – December 2016 These files accompany the Replacement Display for the FT-290R article by Dave…

View on rsgb.org http://rsgb.org/main/publications-archives/radcom/supplementary-information/radcom-downloads/
Preview by Yahoo

73

Dave

802. Re: [electrichandbag] Replacing the Display on an FT290R

Yahoo group: electrichandbag
Date: 2016-11-15 20:46:45 UTC
From: Dave P
Topic: 799 Message: 802

Dave,

A fantastic article. I set about attempting to do a similar thing myself sometime ago but couldn't work out how the original display data was formatted. I didn't spend much time on it as I was kindly offered a replacement display which hadn't bled.

Great work. I'm sure it will give many FT290s a new lease of life

73
de Dave - G4UFS

> On 15 Nov 2016, at 10:41, dave.g8gkq@... [electrichandbag] <electrichandbag@yahoogroups.com> wrote:
>
> I have written an article for the December 2016 RadCom (pp 60-61) on fitting a replacement display to the FT290R. I'd be interested to know if anyone else builds the design.
>
>
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> Whilst I cannot provide copies of the article (you'll need to borrow a friend's RadCom or join the RSGB), I'm happy to provide advice if anyone has trouble in reproducing the design.
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>
>
>
> Dave, G8GKQ
>
>

803. Re: [electrichandbag] Replacing the Display on an FT290R

Yahoo group: electrichandbag
Date: 2016-11-15 20:53:36 UTC
From: Gordonjcp
Topic: 799 Message: 803

On Tue, Nov 15, 2016 at 08:46:45PM +0000, Dave P g4ufs@... [electrichandbag] wrote:
> Dave,
>
> A fantastic article. I set about attempting to do a similar thing myself sometime ago but couldn't work out how the original display data was formatted. I didn't spend much time on it as I was kindly offered a replacement display which hadn't bled.
>
> Great work. I'm sure it will give many FT290s a new lease of life
>
> 73
> de Dave - G4UFS

I haven't seen it yet, but it's funny - I was just looking at little OLED displays and spotted one that was just about the right size for the window on a 290.

Next thing I suppose is to see how hard it is to get a PIC toolchain working.

--
Gordonjcp MM0YEQ

804. Re: Replacing the Display on an FT290R

Yahoo group: electrichandbag
Date: 2016-11-15 21:51:24 UTC
From: alexm_1968@...
Topic: 799 Message: 804

Hi would that also apply to a FT-290R II ?

Alex VE2AIU

805. Re: Replacing the Display on an FT290R

Yahoo group: electrichandbag
Date: 2016-11-16 16:42:23 UTC
From: dave.g8gkq@...
Topic: 799 Message: 805

Hi Alex

I've just looked at the schematic for the FT-290R II and the LCD drive is totally different, so my design would not work with it. The Microcontroller appears to drive the LCD directly - it does not use a separate driver chip like the old FT-290R.

Dave, G8GKQ

806. Re: Replacing the Display on an FT290R

Yahoo group: electrichandbag
Date: 2016-11-18 02:58:56 UTC
From: alexm_1968@...
Topic: 799 Message: 806

Hi Dave, thanks for the info.. Would you know or suggestions on how to fix a disappearing display?? That's what is happening to my FT-290R Mk2 I really would like to fix it..

Alex VE2AIU

807. Re: Replacing the Display on an FT290R

Yahoo group: electrichandbag
Date: 2016-11-19 10:30:26 UTC
From: mansueto.grech@...
Topic: 799 Message: 807

Hi Dave, Just received Radcom and found the article.
Nice Job indeed.
I have a question about the display if I may Dave. The 7 Segment display did you have or you purchased them from some where. If the latter is it possible to the name and/or details of the shop/supplier?
Thank you in advance.
Well done and keep up the good work.
73's
Mans. 9H1GB

808. Re: [electrichandbag] Re: Replacing the Display on an FT290R

Yahoo group: electrichandbag
Date: 2016-11-19 14:02:48 UTC
From: Bernard Mc Garry
Topic: 799 Message: 808

Hi Dave,
I had exactly the same problem, I searched around but no luck anywhere on the LCD 7 Segment display. The only way I could get one was to buy (on Ebay) a 'for parts' donor FT290 mk1, after a reassurance that the display was previously working with no 'bleeding', and luckily it worked fine, only problem was I had to buy the complete FT290. I also got other parts from it that were useful. It was a individual person not a retailer/secondhand dealer, so keep watching on Ebay or if you have Gumtree in your area. I read somewhere that it's almost impossible to convert it to an alternative LCD kit cos the multiplexer driver chip had to be specially designed to work with the processor unit at Yaesu's request, so the only way is as described earlier. They are really a 'classical' set,and luckily made in Japan, and can be modified for all sorts of use, so don't give up.
73's
Bernard GI4HDJ

From: "mansueto.grech@... [electrichandbag]" <electrichandbag@yahoogroups.com>
To: electrichandbag@yahoogroups.com
Sent: Saturday, 19 November 2016, 10:30
Subject: [electrichandbag] Re: Replacing the Display on an FT290R

Hi Dave,Just received Radcom and found the article.Nice Job indeed.I have a question about the display if I may Dave. The 7 Segment display did you have or you purchased them from some where. If the latter is it possible to the name and/or details of the shop/supplier?Thank you in advance.Well done and keep up the good work.73'sMans. 9H1GB

809. Re: [electrichandbag] Re: Replacing the Display on an FT290R

Yahoo group: electrichandbag
Date: 2016-11-19 21:57:13 UTC
From: Ken Johnson
Topic: 799 Message: 809

I also have a couple of 2-and 690r's with crook displays, and I came across these pages a while ago. I swapped a couple of emails with him, but then he just stopped replying- others may have more luck.

http://www.retro.co.za/zs1ke/FT-290R/reverse-engineer.html

http://www.retro.co.za/zs1ke/FT-290R/ZS1KE-display/

Ken, vk7krj

On Sat, Nov 19, 2016 at 9:30 PM, mansueto.grech@... [electrichandbag] <electrichandbag@yahoogroups.com> wrote:

>
>
> Hi Dave,
> Just received Radcom and found the article.
> Nice Job indeed.
> I have a question about the display if I may Dave. The 7 Segment display
> did you have or you purchased them from some where. If the latter is it
> possible to the name and/or details of the shop/supplier?
> Thank you in advance.
> Well done and keep up the good work.
> 73's
> Mans. 9H1GB
>
>
>
>

810. Re: [electrichandbag] Re: Replacing the Display on an FT290R

Yahoo group: electrichandbag
Date: 2016-11-19 22:03:38 UTC
From: Ken Johnson
Topic: 799 Message: 810

Should have checked first- I just rechecked the pages- and Dave's article
is now a pdf file at the bottom of this one

http://www.retro.co.za/zs1ke/FT-290R/ZS1KE-display/

Ken, vk7krj

811. Re: [electrichandbag] Re: Replacing the Display on an FT290R

Yahoo group: electrichandbag
Date: 2016-11-20 09:29:49 UTC
From: dave.g8gkq@...
Topic: 799 Message: 811

Hi All

You can obtain the LED display that I used from Kevin Avery of G3AAF Electronics. He visits most of the Radio Rallies in the UK but has said that he is prepared to supply by mail order. Please contact him directly on kevin@avery03.fsnet.co.uk. The displays are less than £4 each - please contact him to agree a mail order price and method of payment.

73

Dave, G8GKQ

812. Re: [electrichandbag] Re: Replacing the Display on an FT290R

Yahoo group: electrichandbag
Date: 2016-11-20 09:38:36 UTC
From: Gordonjcp
Topic: 799 Message: 812

On Sun, Nov 20, 2016 at 01:29:49AM -0800, dave.g8gkq@... [electrichandbag] wrote:
> Hi All
>
> You can obtain the LED display that I used from Kevin Avery of G3AAF Electronics. He visits most of the Radio Rallies in the UK but has said that he is prepared to supply by mail order. Please contact him directly on kevin@.... The displays are less than ?4 each - please contact him to agree a mail order price and method of payment.

<rummages in untouched bag of stuff from Galashiels rally>

Oh, I *did* pick a couple of them up. They're just the right size, too!

--
Gordonjcp MM0YEQ

813. Re: [electrichandbag] Re: Replacing the Display on an FT290R

Yahoo group: electrichandbag
Date: 2016-11-20 09:54:57 UTC
From: Mansueto Grech
Topic: 799 Message: 813

Thanks for the info Dave
73's
Mans. 9H1GB

On 20 November 2016 at 10:29, dave.g8gkq@... [electrichandbag] <
electrichandbag@yahoogroups.com> wrote:

>
>
> Hi All
>
> You can obtain the LED display that I used from Kevin Avery of G3AAF
> Electronics. He visits most of the Radio Rallies in the UK but has said
> that he is prepared to supply by mail order. Please contact him directly
> on kevin@.... The displays are less than £4 each -
> please contact him to agree a mail order price and method of payment.
>
> 73
>
> Dave, G8GKQ
>
>
>

814. Re: Replacing the Display on an FT290R

Yahoo group: electrichandbag
Date: 2016-11-20 16:35:20 UTC
From: dave.g8gkq@...
Topic: 799 Message: 814

Hi Alex

The only thing that I can think of for your FT290R II is that the display connection to the PCB might need some attention. They usually just compress rubberised connections against the PCB, and this can get loose or corroded.

Dave, G8GKQ

815. Re: Replacing the Display on an FT290R

Yahoo group: electrichandbag
Date: 2016-11-21 01:49:09 UTC
From: alexm_1968@...
Topic: 799 Message: 815

Hi Dave,

Thanks I'll take a look at it..

Alex VE2AIU

816. Re: FT290 Mk 11

Yahoo group: electrichandbag
Date: 2016-11-27 23:26:36 UTC
From: g4joeuk@...
Topic: 652 Message: 816

Sorry for the long delay John, but at last I have found a new one on the Bay.
Its NOS ,
A question now, to power the Battery box without the 9 batteries in, is it center positive or center negative on the lead?.
I got confused with the manual. FT290r II
Any advice welcome.
Joe

817. Re: [electrichandbag] Re: FT290 Mk 11

Yahoo group: electrichandbag
Date: 2016-11-27 23:40:21 UTC
From: Geoff Blake
Topic: 652 Message: 817

I am pretty sure that it is the wrong way round, i.e.+ve outer - it is like this to facilitate the internal switching and is rather a nuisance.

Geoff G8GNZ

##
Geoff Blake, G8GNZ JO01fq: Chelmsford, Essex, UK
<geoff@...> or <melecerties@...>
Using Linux: Ubuntu 14.04 on Intel or Debian on UltraSparc
and Apple OS X El Capitan on my Macbook Pro.
Avoiding Micro$oft like the plague.
##

On 27 November 2016 at 23:26, g4joeuk@... [electrichandbag] <electrichandbag@yahoogroups.com> wrote:

>
>
> Sorry for the long delay John, but at last I have found a new one on the
> Bay.
> Its NOS ,
> A question now, to power the Battery box without the 9 batteries in, is it
> center positive or center negative on the lead?.
> I got confused with the manual. FT290r II
> Any advice welcome.
> Joe
>
>
>

818. Re: [electrichandbag] Re: FT290 Mk 11

Yahoo group: electrichandbag
Date: 2016-11-28 00:13:42 UTC
From: g4joeuk@...
Topic: 652 Message: 818

Yes Geoff I think your right pos+ outer, neg - iner or arse face about Lol

819. Re: [electrichandbag] Re: FT290 Mk 11

Yahoo group: electrichandbag
Date: 2016-11-28 04:52:45 UTC
From: Geoff Blake
Topic: 652 Message: 819

Thinking back, I use a specific charger for the X90's I have, it is a three stage charger for 8/12 Nimh cells which I acquired from somewhere(?). I had to fit the plug specifically and thus make the charger useless for anything other than the FT 2/6/790RII's that I have. I did consider putting a paralleled plug (larger O/D) for charging handhelds that I have, but a problem was the exposed outer of the plug.

73 Geoff

##
Geoff Blake, G8GNZ JO01fq: Chelmsford, Essex, UK
<geoff@...> or <melecerties@...>
Using Linux: Ubuntu 14.04 on Intel or Debian on UltraSparc
and Apple OS X El Capitan on my Macbook Pro.
Avoiding Micro$oft like the plague.
##

On 28 November 2016 at 00:13, g4joeuk@... [electrichandbag] <electrichandbag@yahoogroups.com> wrote:

>
>
> Yes Geoff I think your right pos+ outer, neg - iner or arse face about
> Lol
>
>
>

820. Potential Move of Group to Groups.io

Yahoo group: electrichandbag
Date: 2017-02-01 16:29:01 UTC
From: barfield673@...
Topic: 820 Message: 820

All,

Due to difficulties with Yahoo Groups, I am considering making the move to Groups.io in the near future,

The transfer should be relatively painless. I am a part of several other groups who have made this transition with no ill effects. Members are automatically transferred and enrolled in the new group.

Unless I hear any convincing objections, I will start this process late evening Friday 3rd February, UK time.

Regards
Martin G7MRV

Group Owner

821. Re: [electrichandbag] Potential Move of Group to Groups.io

Yahoo group: electrichandbag
Date: 2017-02-01 17:59:26 UTC
From: g3sdy@...
Topic: 820 Message: 821

Its OK with me, but never heard of the Groups.io before. sounds interesting.
73 Gerald g3sdy

-----Original Message-----
From: barfield673@btinternet.com [electrichandbag] <electrichandbag@yahoogroups.com>
To: electrichandbag <electrichandbag@yahoogroups.com>
Sent: Wed, 1 Feb 2017 16:29
Subject: [electrichandbag] Potential Move of Group to Groups.io

All,

Due to difficulties with Yahoo Groups, I am considering making the move to Groups.io in the near future,

The transfer should be relatively painless. I am a part of several other groups who have made this transition with no ill effects. Members are automatically transferred and enrolled in the new group.

Unless I hear any convincing objections, I will start this process late evening Friday 3rd February, UK time.

Regards
Martin G7MRV

Group Owner

822. Re: [electrichandbag] Potential Move of Group to Groups.io

Yahoo group: electrichandbag
Date: 2017-02-01 20:17:43 UTC
From: Brian Flynn
Topic: 820 Message: 822

Our local radio society is thinking the same. I am happy with that.

73s

Brian GM8BJF

On 01/02/2017 17:59, g3sdy@... [electrichandbag] wrote:
>
> Its OK with me, but never heard of the Groups.io before. sounds
> interesting.
> 73 Gerald g3sdy
>
>
>
>
> -----Original Message-----
> From: barfield673@... [electrichandbag]
> <electrichandbag@yahoogroups.com>
> To: electrichandbag <electrichandbag@yahoogroups.com>
> Sent: Wed, 1 Feb 2017 16:29
> Subject: [electrichandbag] Potential Move of Group to Groups.io
>
>
>
> All,
>
> Due to difficulties with Yahoo Groups, I am considering making the
> move to Groups.io in the near future,
>
> The transfer should be relatively painless. I am a part of several
> other groups who have made this transition with no ill effects.
> Members are automatically transferred and enrolled in the new group.
>
> Unless I hear any convincing objections, I will start this process
> late evening Friday 3rd February, UK time.
>
> Regards
> Martin G7MRV
>
> Group Owner
>
>

--
Dr Brian W Flynn
15 Riselaw Crescent

Edinburgh
EH10 6HN

Home 0131 447 4043
Mob 07969668147

823. Re: [electrichandbag] Potential Move of Group to Groups.io

Yahoo group: electrichandbag
Date: 2017-02-01 21:54:29 UTC
From: Darryl Harvey
Topic: 820 Message: 823

Several other groups I am in have already made the move and made it successfully with no interruptions.
I have no issue with a move.

Darryl

> On 2 Feb 2017, at 3:29 am, barfield673@... [electrichandbag] <electrichandbag@yahoogroups.com> wrote:
>
> All,
>
> Due to difficulties with Yahoo Groups, I am considering making the move to Groups.io <http://groups.io/> in the near future,
>
> The transfer should be relatively painless. I am a part of several other groups who have made this transition with no ill effects. Members are automatically transferred and enrolled in the new group.
>
> Unless I hear any convincing objections, I will start this process late evening Friday 3rd February, UK time.
>
> Regards
> Martin G7MRV
>
> Group Owner
>
>

824. Re: Potential Move of Group to Groups.io

Yahoo group: electrichandbag
Date: 2017-02-07 11:41:05 UTC
From: iw1au@...
Topic: 820 Message: 824

For sure if the group management will improve, why not! Is Groups.io a well consolidated platform?

So if I well understood, no registration will be requested in the new platform? Strange... no data are available so far!
Thanks for clarification.

73 de IW1AU, Gian Maria
---
http://iw1au.altervista.org/ http://iw1au.altervista.org/
http://www.radiomanual.eu/ http://www.radiomanual.eu/

825. Re: Potential Move of Group to Groups.io

Yahoo group: electrichandbag
Date: 2017-02-28 18:45:38 UTC
From: barfield673@...
Topic: 820 Message: 825

Just a note regarding this -

We are still on Yahoo for the present. Unfortunately I have not had the time to set-up ready for a move.

We will remain here for the time being until I have more free time. I will make an announcement prior to any future move

Regards
Martin

826. Charger for NiMh

Yahoo group: electrichandbag
Date: 2017-02-28 21:16:46 UTC
From: josepoyanuk@...
Topic: 826 Message: 826

Can I make a quick question that may have been answered already?

If I put NiMh cells in my FT290R, can I still use the original charger to safety charge the cells inside the radio?

thanks!!

827. Re: [electrichandbag] Charger for NiMh

Yahoo group: electrichandbag
Date: 2017-02-28 21:51:03 UTC
From: <special@...>
Topic: 826 Message: 827

Hi.

I'd have to say no.
The original batteries were NiCd which require a totaly different charge cycle. to NiMh.
As the 290 charger was pretty basic anyway I'd not try using nimh with it but ensure that I charged them in an external charger and put them in when charged.

cheers

----- Original Message -----
From: josepoyanuk@... [electrichandbag]
To: electrichandbag@yahoogroups.com
Sent: Tuesday, February 28, 2017 9:16 PM
Subject: [electrichandbag] Charger for NiMh

Can I make a quick question that may have been answered already?

If I put NiMh cells in my FT290R, can I still use the original charger to safety charge the cells inside the radio?

thanks!!

This email has been checked for viruses by Avast antivirus software.
https://www.avast.com/antivirus

828. Re: [electrichandbag] Charger for NiMh

Yahoo group: electrichandbag
Date: 2017-02-28 23:10:52 UTC
From: Pencoys
Topic: 826 Message: 828

no, definitely NOT. Totally different charge methodology.

However, the NIMh cells are far smaller for their capacity so there is no problem increasing the battery capacity and adding an internal battery conditioner. possibly even a " charge discharge " conditioner which would take your NiMh 3.7 nom cell and buck it to the useable 12v for the rig, but still charge from as little as 5v usb charger...
just a thought...

On 28 Feb 2017 at 21:16, josepoyanuk@... [electrichandbag] wrote:

> Can I make a quick question that may have been answered already?
>
>
> If I put NiMh cells in my FT290R, can I still use the original charger to safety charge the cells inside the radio?
>
>
> thanks!!
>
>

829. Re: Charger for NiMh

Yahoo group: electrichandbag
Date: 2017-03-01 09:41:49 UTC
From: gi0gdp@...
Topic: 826 Message: 829

I charge NiMh batteries with my old chargers for NiCads in another application (radio controlled planes)
However the charging method for Lithium Ion type batteries is completely different, but this doesnt apply to your question.
cheers
Geoff
GI0GDP

830. Re: Charger for NiMh

Yahoo group: electrichandbag
Date: 2017-03-01 10:14:26 UTC
From: buz90a@...
Topic: 826 Message: 830

Hi Geoff,

I am just using my FT290 R on a short telescopic antenna and use the 'call' button just to check the Limavady repeater (LY), I don't have the mic plugged in, but when I try to open the repeater now it won't open. I recall that there wa a lot of abuse by people who wern't probably Hams, so the repeater was off for weeks, and after that I noticed the 'fault'. Would it be the case that it needs to be voice activated as well as the tone burst, or maybe my tone encoder is off freq, what do you think? BTW I must find the mic in the meantime, as it's stored away somewhere.
73's & Thanks
Bernard GI4HDJ

831. Re: [electrichandbag] Re: Charger for NiMh

Yahoo group: electrichandbag
Date: 2017-03-01 11:05:26 UTC
From: Geoff Blake
Topic: 826 Message: 831

Hi Folks,

My FT2/6/790RII's came with one charger, a current limited (at 140mA) ~15.0V brick charger. This was suitable for charging 1400mA/Hr NiCd cells with little possibility of cell damage from moderate overcharge. When charging NimH cells there was no problem, but the charging time had to be extended pro-rata the cell capacity.

To avoid a long charging cycle, I bought a 3 stage controlled charger, which would charge at 3000mA but sensed the battery voltage and reduced the charge current to a few mA float charge when the DeltaV went negative. This enabled me to recharge all three battery packs in one evening.

Hope the above waffle helps.

Geoff - G8GNZ

##
Geoff Blake, G8GNZ JO01fq: Chelmsford, Essex, UK
<geoff@...> or <melecerties@gmail.com>
Using Linux: Ubuntu 14.04 on Intel or Debian on UltraSparc
and Apple OS X El Capitan on my Macbook Pro.
Avoiding Micro$oft like the plague.
##

On 1 March 2017 at 10:14, buz90a@... [electrichandbag] <electrichandbag@yahoogroups.com> wrote:

>
>
> Hi Geoff,
>
> I am just using my FT290 R on a short telescopic antenna and use the
> 'call' button just to check the Limavady repeater (LY), I don't have the
> mic plugged in, but when I try to open the repeater now it won't open. I
> recall that there wa a lot of abuse by people who wern't probably Hams, so
> the repeater was off for weeks, and after that I noticed the 'fault'. Would
> it be the case that it needs to be voice activated as well as the tone
> burst, or maybe my tone encoder is off freq, what do you think? BTW I must
> find the mic in the meantime, as it's stored away somewhere.
> 73's & Thanks
> Bernard GI4HDJ
>
>
>

832. New member - KK6JR

Yahoo group: electrichandbag
Date: 2017-03-01 11:14:54 UTC
From: kk6jr@...
Topic: 832 Message: 832

Hello all,
I'm Henry Black KK5JR, G4NOC, retired in Florida. Hope to become a snowbird (summers in UK, winters in FL).
I have a FT-790R since it was new in (if memory serves) 1981. Bought from the ham shop in North Wales (Mold?) if anyone recalls it.

Of course there are no repeaters on 430MHz in Florida, they are all on 440 so my 790 is only for weak signal work (with yagi and ICOM masthead preamp) hereabouts.

Nice group here,
73 de KK6JR

833. Re: New member - KK6JR

Yahoo group: electrichandbag
Date: 2017-03-01 11:57:46 UTC
From: kk6jr@...
Topic: 832 Message: 833

Typo, sorry, KK6JR, G4NOC. Never been a KK5, though I was one of the very first G6's in a dim and distant past.

834. Re: [electrichandbag] Re: New member - KK6JR

Yahoo group: electrichandbag
Date: 2017-03-01 12:29:49 UTC
From: Geoff Blake
Topic: 832 Message: 834

Hello Henry,

Welcome to the group.

If I remember correctly, the FTx90's were available to cover various frequency ranges, for example the 290 could be set to cover 144.000 to 145.999MHz, and other frequencies too. I have a vague memory that the 790 could be set to cover 440 to 450MHz either as an alternative to or in addition to 430 to 440MHz. This information is available at <http://www.retro.co.za/zs1ke/FT-790R2/>..

73 Geoff G8GNZ

###
Geoff Blake, G8GNZ JO01fq: Chelmsford, Essex, UK
<geoff@...> or <melecerties@gmail.com>
Using Linux: Ubuntu 14.04 on Intel or Debian on UltraSparc
and Apple OS X El Capitan on my Macbook Pro.
Avoiding Micro$oft like the plague.
###

On 1 March 2017 at 11:57, kk6jr@... [electrichandbag] <electrichandbag@yahoogroups.com> wrote:

>
>
> Typo, sorry, KK6JR, G4NOC. Never been a KK5, though I was one of the very
> first G6's in a dim and distant past.
>
>
>

835. Re: [electrichandbag] Re: Charger for NiMh

Yahoo group: electrichandbag
Date: 2017-03-01 16:40:53 UTC
From: <special@...>
Topic: 826 Message: 835

Bernard

According to the repeater list the Limavady repeater needs a 110.9Hz CTCSS tone to open it not the old 1750Hz tone burst that the 290 has.
So unless you've added a CTCSS coder/decoder it won't work as I gues they probably they changed the access requirements to help eliminate the abuse you say had been occuring.

73

Slim
G4IPZ

This email has been checked for viruses by Avast antivirus software.
https://www.avast.com/antivirus

836. Re: Charger for NiMh

Yahoo group: electrichandbag
Date: 2017-03-02 03:43:40 UTC
From: Robert Wilkinson
Topic: 826 Message: 836

Hi Bernard,

It could be the Limavardy repeater has moved to CTCSS only.

All NI repeaters use 110.9Hz CTCSS as far as am aware so that unfortunately is no indication. Sometimes CTCSS is used to combat interference where two repeaters on the same channel suffer from users in range of both. I had this problem with users on Merseyside using moderate power into omni directional antennas taking over GB3LF at Kendal 70 miles away when they were using GB3MR at Stockport on the same channel. Unable to get a resolution on the problem so shifted to CTCSS only in about 2004 and the problem stopped instantly!

More recently our 2m repeater at Lancaster GB3LD has suffered with intermittent local noise on the input so with a 60mile trip every time the squelch needed adjustment opted to move to CTCSS only for that. The only real sufferer with that was myself using older radios that do not have TX CTCSS, but a price worth paying in the end. Not sure what the problem was in NI, but can find out if you need to know. At present there is no easy way of adding the information that a repeater is CTCSS only as I have asked about this though maybe possible in the future. With all Yaesu Fusion repeaters on analogue FM using the internal logic they are definitely CTCSS only. It is possible to add CTCSS to the FT290R though space is limited if the Mutech RX front end is fitted. There was an interesting article on doing this in Radcom as most will be aware using the CTCSS unit from CSTECH. I have used the unit that was available as a kit from JAB, but unfortunately the PCB is no longer available and the CML CTCSS chip is now obsolete which makes future usage difficult once stocks run out.

For NiMH batteries have never bothered about problems charging using the old current limited chargers as it just takes longer. Could be a problem I presume with the rapid chargers. The Nicad batteries went in my old Standard C500, so bought the appropriate 2/3 AA NiMH cells and repopulated the pack maybe 15 years back. Just now needing a new set.

For many years I have used a constant current charger from a design in a long defunct electronics magazine that uses a pair of transistors and two resistors plus a diode to prevent discharge back through the transistors with loss of power that works like a charm with a tightly controlled constant current Even made one up to charge 2A D type nicads I used in my early digital Sony SW radio (2001D?) that I used in Saudi Arabia to listen to BBC World service for over 20 years.

Regards,

Bob, G3VVT

837. Re: Charger for NiMh

Yahoo group: electrichandbag
Date: 2017-03-02 07:43:49 UTC
From: josepoyanuk@...
Topic: 826 Message: 837

Ok. Thanks for the help. I will stick to removing the batteries and charging them externally.

838. Re: [electrichandbag] Re: Charger for NiMh

Yahoo group: electrichandbag
Date: 2017-03-02 22:40:22 UTC
From: Bernard Mc Garry
Topic: 826 Message: 838

Slim, many thanks for this helpful information. It saves a lot of time with the info you kindly provided.
73's
 Bernard
GI4HDJ

From: "special@... [electrichandbag]" <electrichandbag@yahoogroups.com>
To: electrichandbag@yahoogroups.com
Sent: Wednesday, 1 March 2017, 16:40
Subject: Re: [electrichandbag] Re: Charger for NiMh

☐Bernard According to the repeater list the Limavady repeater needs a 110.9Hz CTCSS tone to open it not the old 1750Hz tone burst that the 290 has.So unless you've added a CTCSS coder/decoder it won't work as I gues they probably they changed the access requirements to help eliminate the abuse you say had been occuring. 73 Slim G4IPZ

| | Virus-free. www.avast.com |

839. Re: Charger for NiMh

Yahoo group: electrichandbag
Date: 2017-03-03 21:21:12 UTC
From: stan@...
Topic: 826 Message: 839

And make sure that you use a 2.1mm power plug to power the radio from an external source, and not the commonly available 2.6mm plug. The latter does not properly disconnect the cells, and then they get a 12V constant voltage charge. And the battery box melts, possibly followed by the radio catching fire. End of... I have seen both!

The size above refers to the internal diameter of the plug, it MUST be 2.1mm, and internally wiring a 1 amp fuse in series with the battery will be a good move, as the radio would not normally blow it, and the power plug problem described above would blow the fuse.

HTH,

73 de Stan, G4EGH

840. Re: [electrichandbag] Re: Charger for NiMh

Yahoo group: electrichandbag
Date: 2017-03-05 14:14:06 UTC
From: Geoff Blake
Topic: 826 Message: 840

Another point, and assuming we are talking FTx90R2's here, one of the connectors is (IIRC) wired reverse polarity, i.e. +ve outer. I think it is the larger one, I have none of my info to hand.

Geoff

##
Geoff Blake, G8GNZ JO01fq: Chelmsford, Essex, UK
<geoff@...> or <melecerties@...>
Using Linux: Ubuntu 14.04 on Intel or Debian on UltraSparc
and Apple OS X El Capitan on my Macbook Pro.
Avoiding Micro$oft like the plague.
##

On 3 March 2017 at 21:21, stan@... [electrichandbag] <
electrichandbag@yahoogroups.com> wrote:

>
>
> And make sure that you use a 2.1mm power plug to power the radio from an
> external source, and not the commonly available 2.6mm plug. The latter does
> not properly disconnect the cells, and then they get a 12V constant voltage
> charge. And the battery box melts, possibly followed by the radio catching
> fire. End of... I have seen both!
>
> The size above refers to the internal diameter of the plug, it MUST be
> 2.1mm, and internally wiring a 1 amp fuse in series with the battery will
> be a good move, as the radio would not normally blow it, and the power plug
> problem described above would blow the fuse.
>
> HTH,
>
> 73 de Stan, G4EGH
>
>
>
>

841. Re: [electrichandbag] Re: Replacing the Display on an FT290R

Yahoo group: electrichandbag
Date: 2017-03-05 22:00:10 UTC
From: F1CHF@...
Topic: 799 Message: 841

hello could you help me to have a contact with G3AAF
to get some LCD unit for the FT290
if they are still available !
Francois
direct message , please
F1CHF at FREE.FR

842. Re: [electrichandbag] Re: Replacing the Display on an FT290R

Yahoo group: electrichandbag
Date: 2017-03-07 15:10:37 UTC
From: brian.flynn@tiscali.co.uk
Topic: 799 Message: 842

The units that Kevin G3AAF has are LEDs. His email is
<Kevin@...>

I built one up to try with a 290R but found that the display was fine
indoors but outside in high ambient light levels it was difficult to read.

73s
Brian GM8BJF

On 05/03/2017 22:00, F1CHF@... [electrichandbag] wrote:
> hello
>
> could you help me to have a contact with G3AAF
> to get some LCD unit for the FT290
> if they are still available !
> Francois
> direct message , please
> F1CHF at FREE.FR
>
>

843. Re: Charger for NiMh

Yahoo group: electrichandbag
Date: 2017-04-10 08:59:22 UTC
From: dave.gotech@...
Topic: 826 Message: 843

You have probably found out by now, but just in case you havent, reptrs requiring ctcss send a single letter after their callsign which indicates which ctcss code they require.
73...,Dave.

844. Re: Charger for NiMh

Yahoo group: electrichandbag
Date: 2017-04-12 09:43:30 UTC
From: Robert Wilkinson
Topic: 826 Message: 844

Hi Dave,

If all things were equal that would be the case, but sadly Yaesu have decided not to comply with this on at least the early versions of their DR-1XE Fusion repeater with the internal logic. It was found impossible to add the CTCSS suffix to the callsign except by using external logic. The repeater on analogue is definitely CTCSS only, though only apparently needs this for initial access on every over.

The repeater apparently meets the North American standards for operation.

Regards,

Bob, G3VVT

1a. Re: Charger for NiMh

Posted by: dave.gotech@... dave_gotech

Date: Mon Apr 10, 2017 1:59 am ((PDT))

You have probably found out by now, but just in case you havent, reptrs requiring ctcss send a single letter after their callsign which indicates which ctcss code they require. 73...,Dave.

845. Re: Charger for NiMh

Yahoo group: electrichandbag
Date: 2017-04-12 22:36:43 UTC
From: dave.gotech@...
Topic: 826 Message: 845

Hi Bob.....surely that puts them in contravention of their nov then. Is there not a way to program the call sign?
D

846. rubber glue

Yahoo group: electrichandbag
Date: 2017-04-27 20:54:33 UTC
From: josepoyanuk@...
Topic: 846 Message: 846

Hi,

Can anyone tell what is the type of glue used to seal a speaker to the radio case and make it water proof, please? I've seen this in some radio, it is like rubber and it is not silicon. It is elastic and at the same time strong, whereas silicon can be tore with your finger nail. It is white in color.

Thank you!

847. Re: [electrichandbag] rubber glue

Yahoo group: electrichandbag
Date: 2017-04-28 17:10:05 UTC
From: g4sra
Topic: 846 Message: 847

Very similar to Evo-Stik Impact

On 27/04/17 21:54, josepoyanuk@... [electrichandbag] wrote:
> Hi,
>
>
> Can anyone tell what is the type of glue used to seal a speaker to the radio case and make it water proof, please? I've seen this in some radio, it is like rubber and it is not silicon. It is elastic and at the same time strong, whereas silicon can be tore with your finger nail. It is white in color.
>
>
> Thank you!
>

848. Re: [electrichandbag] rubber glue

Yahoo group: electrichandbag
Date: 2017-04-28 21:04:56 UTC
From: Bernard Mc Garry
Topic: 846 Message: 848

Just thinking it might be 'hot melt glue' which manufacturers of PCB's tend to use to bond large components to the PCB/PWB for mechanical strength. You can get this hot melt glue along with a gun for melting and applying in most DIY stores etc, for about $7 etc.73's
Hope this helps,Bernard
GI4HDJ

From: "g4sra g4sra@... [electrichandbag]" <electrichandbag@yahoogroups.com>
To: electrichandbag@yahoogroups.com
Sent: Friday, 28 April 2017, 18:10
Subject: Re: [electrichandbag] rubber glue

  Very similar to Evo-Stik Impact

On 27/04/17 21:54, josepoyanuk@....uk [electrichandbag] wrote:
> Hi,
>
>
> Can anyone tell what is the type of glue used to seal a speaker to the radio case and make it water proof, please? I've seen this in some radio, it is like rubber and it is not silicon. It is elastic and at the same time strong, whereas silicon can be tore with your finger nail. It is white in color.
>
>
> Thank you!
>

849. FT290 R11 no tx

Yahoo group: electrichandbag
Date: 2017-05-30 13:42:31 UTC
From: davecossar@...
Topic: 849 Message: 849

I have a FT 290 R11 it will not transmit. on any mode

The FM osc will not oscillate
The fault appears to be lack of voltage on pin 3 at The JO3/J08 main board to the control board

I think that Pin 3 should go to +5v on TX it goes to -4v

Have any of the group done fault finding on the control board?
It is hard to do as it gets power from the other boards.

dave GM3WIL

850. LSB Fault

Yahoo group: electrichandbag
Date: 2017-06-06 13:11:09 UTC
From: davecossar@...
Topic: 850 Message: 850

I notice that on LSB I'm on freq but the rx/tx audio is very restricted USB OK
Could my filter be faulty

Dave

851. Faulty Control Board

Yahoo group: electrichandbag
Date: 2017-06-06 15:47:38 UTC
From: davecossar@...
Topic: 851 Message: 851

Has anyone an OK control board for a 290 MK2 for sale .Mine will not give me 7volts at pin 3 on TX

852. Re: [electrichandbag] LSB Fault

Yahoo group: electrichandbag
Date: 2017-06-07 06:34:31 UTC
From: Pencoys
Topic: 850 Message: 852

more likely the CIO is off frequency

On 6 Jun 2017 at 13:11, davecossar@...
[electrichandba[electrichandbag] LSB Fault wrote:

> I notice that on LSB I'm on freq but the rx/tx audio is very restricted USB
> OK
> Could my filter be faulty
>
> Dave
>
>

853. New Member

Yahoo group: electrichandbag
Date: 2017-06-07 11:28:58 UTC
From: Ernie Gray
Topic: 853 Message: 853

It is funny how radios come and go throughout our ham radio lives, and you always come around to acquire rigs you have had in the past because... you like them.
The Yaesu FT-290/690's fall into thus trap for me. I have owned a new FT-690R in 1984(?), my first FT-290RII 1992, and a few more 290RII, and a beaten but functioning FT-690RII since. Currently I own an FT-290RII, with a tx issue, and I recently bought a pristine FT-690RII, in very good condition right down to the box, perfect radio, FTS-7A installed, works and looks great.
NOW, who has a '790RII they want to part with?
I hope to share some tips and help with the group.
73'sErnie GrayW1MRQ

854. Re: AGC fault - possible cure found?

Yahoo group: electrichandbag
Date: 2017-06-08 08:03:27 UTC
From: mailcraigy@...
Topic: 765 Message: 854

Strange you mention this as mine developed the same fault after it had been stored in my loft for some considerable time, and I do have condensation in there as metal objects corrode and rust.

A nice find! Thanks for passing this info on

Craig G0KVL

855. RE: [electrichandbag] Re: AGC fault - possible cure found?

Yahoo group: electrichandbag
Date: 2017-06-08 08:07:52 UTC
From: dave cossar
Topic: 765 Message: 855

Does anyone know how the TX7 voltage is obtained is it through the two regulator transistors?

Dave

From: electrichandbag@yahoogroups.com
[mailto:electrichandbag@yahoogroups.com]
Sent: 08 June 2017 09:03
To: electrichandbag@yahoogroups.com
Subject: [electrichandbag] Re: AGC fault - possible cure found?

Strange you mention this as mine developed the same fault after it had been stored in my loft for some considerable time, and I do have condensation in there as metal objects corrode and rust.

A nice find! Thanks for passing this info on

Craig G0KVL

856. Re: [electrichandbag] Re: AGC fault - possible cure found?

Yahoo group: electrichandbag
Date: 2017-06-08 09:14:25 UTC
From: g4sra
Topic: 765 Message: 856

Um, some circuit diagram component reference numbers would have been
helpful. No idea if this is what you are referring to...

In conjunction with the TX\RX voltage rails there are two "switch"
transistors that pull the AGC\ALC voltage to ground at changeover to
protect the RX\TX stages from injecting RF up ones own bottom.

It is this stage that actually often causes the "deafness". The test is
simple, if at first turn on the Rig is deaf and the S-Meter does not
move, measure your TX power. If that is also down then both ALC and AGC
are affected and it is not the FET that drives the S-Meter\AGC at fault
as has been suggested in multiple posts.

On 08/06/17 09:07, 'dave cossar' davecossar@...
[electrichandbag] wrote:
> Does anyone know how the TX7 voltage is obtained is it through the two
> regulator transistors?
>
>
>
> Dave
>
>
>
> _____
>
> From: electrichandbag@yahoogroups.com
> [mailto:electrichandbag@yahoogroups.com]
> Sent: 08 June 2017 09:03
> To: electrichandbag@yahoogroups.com
> Subject: [electrichandbag] Re: AGC fault - possible cure found?
>
>
>
>
>
>
> Strange you mention this as mine developed the same fault after it had been
> stored in my loft for some considerable time, and I do have condensation in
> there as metal objects corrode and rust.
>
> A nice find! Thanks for passing this info on
>
> Craig G0KVL
>
>
>

>

857. Re: FT290 R11 no tx

Yahoo group: electrichandbag
Date: 2017-06-12 11:57:20 UTC
From: rickfrdm@...
Topic: 849 Message: 857

It is not easy to do fault finding on the Control Board due to connectors not being easy to get to, just take your time and you should be able to get it working again.

Check J08(J03) for 7vdc if the 7 vdc if missing check JP01(P01) this is the small connecter soldered to the Control board to left of the SSB filter transistor 2SB546, this is a common fault.

Rick H

858. Re: AGC fault - possible cure found?

Yahoo group: electrichandbag
Date: 2017-06-12 13:02:02 UTC
From: g8vhl@...
Topic: 765 Message: 858

I can confirm that the cure is not permanent. After several months the fault came back. I dried out my dehumidifier blocks and repeated the process of drying the rig out. After only a few days the fault had gone. So, at least in my case, the AGC fault is definitely due to moisture absorption.

859. RE: [electrichandbag] Re: FT290 R11 no tx

Yahoo group: electrichandbag
Date: 2017-06-12 13:54:29 UTC
From: dave cossar
Topic: 849 Message: 859

Hi Rick is that transistor on the control board?

what is the identifier of it

I do not have +7v on TX at the JO8 ctrl to the J03 on the main board

Dave

From: electrichandbag@yahoogroups.com
[mailto:electrichandbag@yahoogroups.com]
Sent: 12 June 2017 12:57
To: electrichandbag@yahoogroups.com
Subject: [electrichandbag] Re: FT290 R11 no tx

It is not easy to do fault finding on the Control Board due to connectors not being easy to get to, just take your time and you should be able to get it working again.

Check J08(J03) for 7vdc if the 7 vdc if missing check JP01(P01) this is the small connecter soldered to the Control board to left of the SSB filter transistor 2SB546, this is a common fault.

Rick H

860. Re: [electrichandbag] Re: AGC fault - possible cure found?

Yahoo group: electrichandbag
Date: 2017-06-12 14:21:49 UTC
From: g4sra
Topic: 765 Message: 860

On 12/06/17 14:02, g8vhl@... [electrichandbag] wrote:
> I can confirm that the cure is not permanent. After several months the fault came back. I dried out my dehumidifier blocks and repeated the process of drying the rig out. After only a few days the fault had gone. So, at least in my case, the AGC fault is definitely due to moisture absorption.
>
The method I have used successfully on two FT290R's is to leave them continuously powered up for a week. Now within seconds of switch-on everything is as it should be, as long as they are operated at least once a fortnight (despite one of them living in a very damp shack).

Also a hot soldering iron anywhere near those FET's for 3 seconds will instantly remove the fault for 30 mins or thereabouts....

A 1M Ohm X10 scope probe also removes the fault. This is a case of Quantum-Mechanics, simply trying to measure the fault changes the outcome....

862. Re: FT290 R11 no tx

Yahoo group: electrichandbag
Date: 2017-06-12 16:03:34 UTC
From: rickfrdm@...
Topic: 849 Message: 862

No not 7vdc on TX the 7vdc should be there all the time. To find the transistor just follow the wiring from the small connecter soldered to the Control board to left of the SSB filter, the transistor is bolted to the chassis far left not easy to see I think the wiring to it are brown, red, and orange. The Collector (Red wire) should be at 7vdc the Base (Brown wire) should be biased negative with respect to the Emitter (Orange wire). If you look on the far-left hand side you will find a Molex plug vertical mounted (Brown, Red and Orange wires) this plug straight on to the transistor Q1 (2SB546).

863. RE: [electrichandbag] Re: FT290 R11 no tx

Yahoo group: electrichandbag
Date: 2017-06-12 16:02:48 UTC
From: dave cossar
Topic: 849 Message: 863

Ah! I've been to that one my problem is the +7v at TX7 is missing from t
T03/T07 it is only +1v

Now how that is obtained I don't know.

dave

From: electrichandbag@yahoogroups.com
[mailto:electrichandbag@yahoogroups.com]
Sent: 12 June 2017 16:59
To: electrichandbag@yahoogroups.com
Subject: RE: [electrichandbag] Re: FT290 R11 no tx

No not 7vdc on TX the 7vdc should be there all the time. To find the transistor just follow the wiring from the small connecter soldered to the Control board to left of the SSB filter, the transistor is bolted to the chassis far left not easy to see I think the wiring to it are brown, red, and orange. The Collector (Red wire) should be at 7vdc the Base (Brown wire) should be biased negative with respect to the Emitter (Orange wire)should be at 13.8vdc. If you look on the far-left hand side you will find a Molex plug vertical mounted (Brown, Red and Orange wires) this plug straight on to the transistor Q1 (2SB546).

Rick H

864. FL2025 Not keying

Yahoo group: electrichandbag
Date: 2017-06-12 16:15:00 UTC
From: Ernie Gray
Topic: 864 Message: 864

The thread of the "FT290RII no tx" reminded me that my own FT290RII does not key the 25w amplifier. But the rig on batteruies works fine, both on rx and tx.
73's
Ernie GrayW1MRQ

866. RE: [electrichandbag] Re: FT290 R11 no tx

Yahoo group: electrichandbag
Date: 2017-06-12 16:22:53 UTC
From: rickfrdm@...
Topic: 849 Message: 866

So the aways 7vdc is ok then?

867. RE: [electrichandbag] Re: FT290 R11 no tx

Yahoo group: electrichandbag
Date: 2017-06-12 16:28:51 UTC
From: dave cossar
Topic: 849 Message: 867

yes +7 Ok it receives OK as well

It is just the TX7 is only +1v and the FM Osc needs +7 to work

Dave

From: electrichandbag@yahoogroups.com
[mailto:electrichandbag@yahoogroups.com]
Sent: 12 June 2017 17:21
To: electrichandbag@yahoogroups.com
Subject: RE: [electrichandbag] Re: FT290 R11 no tx

So the always 7vdc is ok then?

868. Re: FL2025 Not keying

Yahoo group: electrichandbag
Date: 2017-06-12 16:29:07 UTC
From: rickfrdm@...
Topic: 864 Message: 868

Can you hear the relay click in PTT.

869. FT-290R Power fade

Yahoo group: electrichandbag
Date: 2017-06-12 16:33:36 UTC
From: qjru3v5rqxwudcehf432wqdjibhfo6er5ohd7ycg@...
Topic: 869 Message: 869

Hello chaps. I am the proud owner of 2x 290s and 1x 690.

Lately I have noticed the screen looks dull. For example when I switch the radio on all is bright and fine..
After an hour I notice the lamp behind the signal meter is dull. If it is left on longer then it gets worse and wont even transmitt.

Someone did mention the caps maybe failing but I was wondering if anybody could help in locating the main Offenders. I would guess the regulator board is a good place to start. Can anybody please help.

Also the power source is fine. Steady 13.5v.

870. RE: [electrichandbag] Re: FT290 R11 no tx

Yahoo group: electrichandbag
Date: 2017-06-12 16:36:52 UTC
From: rickfrdm@...
Topic: 849 Message: 870

So what voltages do you have around JP06

Rick H

871. Re: [electrichandbag] Re: FL2025 Not keying

Yahoo group: electrichandbag
Date: 2017-06-12 16:37:23 UTC
From: Ernie Gray
Topic: 864 Message: 871

No cannot hear the relay click. AND I knw the amp keys and operates as I have bench tested the amp with clip leads\ and an HP8640 generator. I also measured the drive level from the '290 at 80 mW Ernie GrayW1MRQ 399 Clinton RoadAntrim, NH, 03440603-770-7408

From: "rickfrdm@gmail.com [electrichandbag]" <electrichandbag@yahoogroups.com>
To: electrichandbag@yahoogroups.com
Sent: Monday, June 12, 2017 12:29 PM
Subject: [electrichandbag] Re: FL2025 Not keying

Can you hear the relay click in PTT.

872. Re: FT-290R Power fade

Yahoo group: electrichandbag
Date: 2017-06-12 16:43:19 UTC
From: rickfrdm@...
Topic: 869 Message: 872

Try replacing all the electrolytic caps on the regulator board.

Rick H

873. RE: [electrichandbag] Re: FT290 R11 no tx

Yahoo group: electrichandbag
Date: 2017-06-12 17:08:59 UTC
From: dave cossar
Topic: 849 Message: 873

Hi Rick,

I took them but lost the record of it I think TX7 appears at the other molex plug but not sure

dave

From: electrichandbag@yahoogroups.com [mailto:electrichandbag@yahoogroups.com]
Sent: 12 June 2017 17:37
To: electrichandbag@yahoogroups.com
Subject: RE: [electrichandbag] Re: FT290 R11 no tx

So what voltages do you have around JP06

Rick H

874. Re: FT-290R Power fade

Yahoo group: electrichandbag
Date: 2017-06-12 18:45:19 UTC
From: qjru3v5rqxwudcehf432wqdjibhfo6er5ohd7ycg@...
Topic: 869 Message: 874

I have managed to replace all but the 2 x 50v 1uf and 2x 50v .47uf
I am going to have to order some...

875. Re: [electrichandbag] Re: FL2025 Not keying

Yahoo group: electrichandbag
Date: 2017-06-12 19:49:44 UTC
From: rickfrdm@...
Topic: 864 Message: 875

if you are saying that the amp is working OK then I would check switch the change over switch.

876. Re: FT-290R Power fade

Yahoo group: electrichandbag
Date: 2017-06-12 20:38:17 UTC
From: qjru3v5rqxwudcehf432wqdjibhfo6er5ohd7ycg@...
Topic: 869 Message: 876

I have replaced all apart from two 50v 1uf and two 50v .47ufs because I dont have them in my collection so I need to order some of them... but I poped it back in and No change as yet...

877. RE: [electrichandbag] Re: FT290 R11 no tx

Yahoo group: electrichandbag
Date: 2017-06-23 17:17:25 UTC
From: davecossar@...
Topic: 849 Message: 877

I got my +7v TX to work it was a pnp power transistor Chassis mounted and an electrolitic associated with it but now there is no power out.
I can hear it TX ing
I replaced the PA ..usual fault, not that so I found out the miniature Coax plug was not making contact thru the board to the other side.
My PA is blown I was putting rf into an O/C due to the coax plug feed thru failure

The saga continues

Dave GM3WIL

878. Ft-290R ll LCD

Yahoo group: electrichandbag
Date: 2017-07-03 20:44:28 UTC
From: alexm_1968@...
Topic: 878 Message: 878

Hello all, finally I got the time to get into the FT-290R ll and try to fix the dissapearing LCD screen, I have cleaned it, put it back together to a certain point where I could test it and nothing has changed....from before only a few pieces of characters are showing.How do I fix??
Any ideas???

Alex VE2AIU

879. Re: [electrichandbag] Ft-290R ll LCD

Yahoo group: electrichandbag
Date: 2017-07-03 21:56:54 UTC
From: Alberto Calderara
Topic: 878 Message: 879

Hi Alex,

I think that your problem is in the "zebra" conductive rubber strip, which ensures the electric connections between the LCD pads and the pads on the CPU UNIT pcb (it is an alternation of dark conductive rubber and white insulating rubber): maybe a misalignment and/or poor contact due to insufficient pressure between the LCD/pcb pads and the surfaces of the rubber strip.

I don't know how did you separate and reassemble the LCD, so I give you the following procedure:
1) the "zebra" rubber strip must be perfectly clean from dust, and the same for the pads printed on the glass of the LCD: use alcol and a cotton stick.
2) the same fir the pads on pcb: better use a dry pcb cleaner.
3) put the "zebra" rubber strip on the pcb, aligning the dark elements on the copper pads.
4) put the LCD display on the "zebra" rubber strip, having care of the same aligment.
5) keep the LCD pressed onto the "zebra" strip, and fasten it to the CPU UNIT pcb.

On Mon, 7/3/17, alexm_1968@... [electrichandbag] <electrichandbag@yahoogroups.com> wrote:

Subject: [electrichandbag] Ft-290R ll LCD
To: electrichandbag@yahoogroups.com
Date: Monday, July 3, 2017, 10:44 PM

Hello all, finally I got the time to
get into the FT-290R ll and try to fix the dissapearing
LCD screen, I have cleaned it, put it back together to a
certain point where I could test it and nothing has
changed....from before only a few pieces of characters are
showing.How do I fix?? Any ideas???
Alex VE2AIU

880. Re: [electrichandbag] Ft-290R II LCD

Yahoo group: electrichandbag
Date: 2017-07-03 22:36:33 UTC
From: alexm_1968@...
Topic: 878 Message: 880

Hi Alberto, The LCD is aligned and on the unit tight but yet still no full LCD only some segment are visible. It's such a chore to take this apart. What else could it be??

Alex VE2AIU

881. Re: Ft-290R II LCD

Yahoo group: electrichandbag
Date: 2017-07-04 04:43:16 UTC
From: alexm_1968@...
Topic: 878 Message: 881

Hello Alberto,

So I took it apart again and cleaned it from top to bottom and reinstalled it, still the same just a few segments.
I'm beginning to think that it could be the LCD driver or an associated cap or resistor... by any chance do you know the driver part number??

Thanks in advance

Alex VE2AIU

882. Re: Ft-290R II LCD

Yahoo group: electrichandbag
Date: 2017-07-06 15:25:05 UTC
From: barfield673@...
Topic: 878 Message: 882

Have you reflowed the pins of the driver IC? It may just be a dry joint. Its worth giving every soldered connection a going over

Martin G7MRV

883. Re: Ft-290R II LCD

Yahoo group: electrichandbag
Date: 2017-07-06 23:14:07 UTC
From: alexm_1968@...
Topic: 878 Message: 883

Hi Martin, No I haven't done that, but I'm going to do it. Which is the driver IC?

Alex VE2AIU

884. FT290RMk2

Yahoo group: electrichandbag
Date: 2017-07-09 14:42:11 UTC
From: alexm_1968@...
Topic: 884 Message: 884

Does anybody have a FT-290R Mk2 that would like to sell??

Alex VE2AIU

885. Re: Ft-290R II LCD

Yahoo group: electrichandbag
Date: 2017-07-12 15:51:24 UTC
From: barfield673@...
Topic: 878 Message: 885

Im afraid I dont know on the mkII. But its almost certainly going to be a big black square with legs all sides, very close to the LCD (under it or on the other side of the board)

886. RE: [electrichandbag] Re: FT290 R11 no tx

Yahoo group: electrichandbag
Date: 2017-07-13 14:35:55 UTC
From: davecossar@...
Topic: 849 Message: 886

getting there repaced the PNP transistor with a tip 126 I can get 2'5 watts out now
Saga continues
Dare I replace the bulbs ?
anyone got a Mic for sale?

DAve GM3WIL

887. Mic required or just a circuit of the MH10eb

Yahoo group: electrichandbag
Date: 2017-07-13 14:38:07 UTC
From: davecossar@...
Topic: 887 Message: 887

HI has any one got a MH10eb Mic for a FT290Mk2 for sale ?

Dave GM3WIL

888. RE: [electrichandbag] Re: FT290 R11 no tx

Yahoo group: electrichandbag
Date: 2017-07-14 13:54:40 UTC
From: davecossar@...
Topic: 849 Message: 888

Hi Rick,
I got the FT 290 MK2 fixed , I replaced the PNP chassis mounted power transistor
The first one was with a BD136 but it would only give 6 volts out.

then replaced it with a TP125 new heat sink paste works well made new sides for it.

2.5 watts out after the PA transistor replace , don't trust the cheapies from the far east like I did.

UK seller tests them before dispatch.

I now need a Mic for the FT290 mk2 a MH10 or even a circuit diagam of one I could copy.
Not brave enough to replace the bulbs...

Dave GM3WIL

889. Re: Mic required or just a circuit of the MH10eb

Yahoo group: electrichandbag
Date: 2017-07-15 07:48:17 UTC
From: ebbe.skovgaard@...
Topic: 887 Message: 889

Look in the "files"-section, there you'll find it.

Best regards Ebbe, oz5es

890. Re: Ft-290R II LCD

Yahoo group: electrichandbag
Date: 2017-07-19 21:14:02 UTC
From: iz2ewv@...
Topic: 878 Message: 890

Alex,

Sorry for the delay...
Unfortunately the driver IC is the CPU of the radio. You could find a replacement only from a 2nd-hand FT-290RII sold "for parts" in a flea market or on eBay. In the CPU board there's not much more: only one capacitor and some CMOS ICs that decode the keyboard, if I'm not missing... The LCD is completely pin-to-pin connected to the CPU. I'm thinking that it could be more likely a matter of supply voltages brought to the CPU board: maybe a leaking capacitor elsewhere. I will send you the PDF of the technical manual, which also carries, for each board, the list of voltages. Including the CPU board.

Tnx es 73 de
Alberto Calderara
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http://www.arimonza.it http://www.arimonza.it/

Inviato da iPad

891. Re: Ft-290R II LCD

Yahoo group: electrichandbag
Date: 2017-07-25 13:56:17 UTC
From: alexm_1968@...
Topic: 878 Message: 891

Hi Alberto,

thanks for the info, fortunately I have located a near mint working FT-290R Mk2, and I'm going to use the broken one for parts....

Alex VE2AIU

892. Re: [electrichandbag] Re: Ft-290R ll LCD

Yahoo group: electrichandbag
Date: 2017-07-25 14:16:02 UTC
From: Ernie Gray
Topic: 878 Message: 892

Hi Alex,
Again we have the same rigs!
I have had 3 FT-290RII, and currently have one for use with microwave transverters. I also have a FT-690RII for 6 meters. Also Kenwood TR-751A and TR-851A. I love them all!!!!
OLD 6 meter AM rigs too
73's
Ernie GrayW1MRQ 399 Clinton RoadAntrim, NH, 03440603-770-7408

From: "alexm_1968@... [electrichandbag]" <electrichandbag@yahoogroups.com>
To: electrichandbag@yahoogroups.com
Sent: Tuesday, July 25, 2017 10:00 AM
Subject: [electrichandbag] Re: Ft-290R ll LCD

  Hi Alberto,
thanks for the info, fortunately I have located a near mint working FT-290R Mk2, and I'm going to use the broken one for parts....

Alex VE2AIU

893. Re: [electrichandbag] Re: Ft-290R II LCD

Yahoo group: electrichandbag
Date: 2017-07-26 02:40:52 UTC
From: alexm_1968@...
Topic: 878 Message: 893

Hi Ernie , This is too funny..... I guess we have the same taste in rigs...

Alex VE2AIU
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894. Battery box for FT 290 Mk 2

Yahoo group: electrichandbag
Date: 2017-10-11 06:54:19 UTC
From: kkyahoo@...
Topic: 894 Message: 894

Hi, Does anyone have a FBA-8 battery box they want to part with?

Thanks

Kevin

895. Thanks

Yahoo group: electrichandbag
Date: 2017-11-08 00:21:53 UTC
From: paddy_973@...
Topic: 895 Message: 895

Thanks for the add I've got myself an ft290 with mutek front end, in the summer I'll be out in the car with a little yargi from the top of Sutton Bank. M0HQJ Henry

896. Fitting a new PA Module - FT290R Mk2

Yahoo group: electrichandbag
Date: 2017-11-11 11:13:27 UTC
From: healing_touch@...
Topic: 896 Message: 896

I have the FT290R Mk2 and after a silly mistake crossing wiring it to a car battery, it has been confirmed that the power amp module is to be replaced as it is faulty. All other components seem to be OK and the radio works with a seperate feed to the rear 'tabs' of the casing. This radio was working absolutely fine prior to this problem. When fitting the new module, is there any procedure to follow before using it as normal, i.e. realignment etc? Or is it just a case of refitting the module and all should be good?

Many thanks for any advice...

73 Kev - 2E0LYF

897. Re: [electrichandbag] Fitting a new PA Module - FT290R Mk2

Yahoo group: electrichandbag
Date: 2017-11-11 12:02:55 UTC
From: ian
Topic: 896 Message: 897

Odd to do the PA by reversing the power, normally you just end up blowing the protection diodes.

Ian

2E0IJH

Sent: Saturday, November 11, 2017 at 11:13 AM
From: "healing_touch@... [electrichandbag]"
To: electrichandbag@yahoogroups.com
Subject: [electrichandbag] Fitting a new PA Module - FT290R Mk2

I have the FT290R Mk2 and after a silly mistake crossing wiring it to a car battery, it has been confirmed that the power amp module is to be replaced as it is faulty. All other components seem to be OK and the radio works with a seperate feed to the rear 'tabs' of the casing. This radio was working absolutely fine prior to this problem. When fitting the new module, is there any procedure to follow before using it as normal, i.e. realignment etc? Or is it just a case of refitting the module and all should be good?

Many thanks for any advice...

73 Kev - 2E0LYF

898. Re: [electrichandbag] Fitting a new PA Module - FT290R Mk2

Yahoo group: electrichandbag
Date: 2017-11-14 18:11:41 UTC
From: healing_touch@...
Topic: 896 Message: 898

That's what we thought Ian but the protection diodes tested out fine. I've received the new module through the post yesterday, fitted it today and all works fine now.

73 Kev - 2E0LYF

899. £50 credit on switching to Bulb Energy - Referral link

Yahoo group: electrichandbag
Date: 2017-12-13 15:48:03 UTC
From: barfield673@...
Topic: 899 Message: 899

I swapped my energy supplier a while back, as heating the shack and workshop was costing a packet. My supplier now, Bulb Ltd, has a referral scheme where new customers get a £50 credit if they switch using a customers personal referral link.

So heres my link - bulb.co.uk/refer/martin7906 https://l.facebook.com/l.php?u=http%3A%2F%2Fbulb.co.uk%2Frefer%2Fmartin7906&h=ATODXN92jpOFX-AGrZLC6rb6gY0z7J9d6fFma-FbCZWsvRKRhX0c6t5hBhM0lzBuKYn02xb2EJHPxFSvNQ8dJjEMnURqqPTGdlhcqXL_zM9yrgmUUj94B-ddUJKuY-2ryX5sNoeuQEg3Ng34m2xgZq0iPIe9mqgxh0njVAnLZtsqcSVExQgCCBVs1g-BRXB_WXMRzrx0bb4Sv871e_qyy982U2qNe2DrSfZ40ugWESXmg7VcuoBx_gVy0Tt2IvdsdvGBu5Mu19-1nUfA-e5ZofCthg

Feel free to use my link to switch, if after youve checked them out for yourself you decide to go that way.

Average saving looks to be about £200 - could get another couple of 290s with that!

Martin G7MRV

900. Re: £50 credit on switching to Bulb Energy - Referral link

Yahoo group: electrichandbag
Date: 2017-12-13 23:32:25 UTC
From: Richard Kelly
Topic: 900 Message: 900

Thanks for the info Martin. Very much appreciated I will certainly make some enquiries.
Merry Xmas 73 de gm0grd Rick